

THE POLITICS OF UNCERTAINTY IN A GLOBAL MARKET:
THE HAZELNUT EXCHANGE AND ITS PRODUCTION

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THE HAZELNUT EXCHANGE AND ITS PRODUCTION

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The Politics of Uncertainty in a Global Market:

The Hazelnut Exchange and its Production

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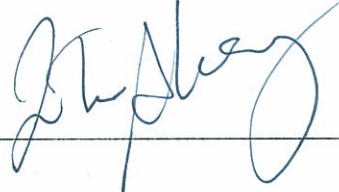
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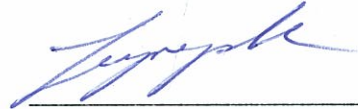
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Dissertation Abstract

Ebru Tekin Bilbil, “The Politics of Uncertainty in a Global Market: The Hazelnut Exchange and its Production”

The purpose of this dissertation is to examine how the market works on the ground. It analyzes the hazelnut market in Turkey and explores the interaction between the market agents. It reveals how this interaction relates to the presence, production and circulation of forms of uncertainty. It also ascertains what uncertainty means in market settings and what role production, representation, dissemination and limiting of uncertainty play in market relations.

In market relations, intentionally or unintentionally, individuals try to forecast, value, prevent and qualify (as risk or loss) uncertainties. They assume that they can perceive, measure and avoid uncertainties on the basis of probabilities, level of knowledge about unknowns or ability to overcome. As such, uncertainty is assumed to be given yet with inadequate attention into its constitutive dynamics, actors of its making and its role in the market creation. The dissertation examines how uncertainties are constructed and what role this construction plays in constituting the market exchange and relations. The conclusions reached are that economizing uncertainty becomes a market device in production, exchange, circulation, pricing and policy making.

The dissertation starts with an analysis of the market reform policies and agricultural transformation in Turkey. Next, it traces the processes of the production and calculation of hazelnuts, examining how hazelnuts are produced and measured under uncertainty, and how uncertainty is created in the calculation of hazelnuts. It then explains exchange relations and price politics created at different spheres and with different expectations. After that, it explores the struggles and controversies among market groups over the production, calculation, exchange and pricing of hazelnuts and policy making. Subsequently, it analyzes what the politics of uncertainty means and how it is produced in the market setting.

Following uncertainties and observing their making in markets require a research program that draws on literatures concerning economics, political science and sociology. The research program includes the discussion of material things, individuals, formal and informal institutions and prices as well as their interactions. The research was based primarily on qualitative interviews, participant observations, case studies and document analysis conducted between 2006 and 2009.

Tez Özeti

Ebru Tekin Bilbil, “The Politics of Uncertainty in a Global Market: The Hazelnut Exchange and its Production”

Bu tezin amacı piyasaların nasıl işlediğini yerinde incelemektir. Tez, Türkiye fındık piyasasını araştırmakta ve piyasa etkenleri arasındaki etkileşimi analiz etmektedir. Çalışma, bu etkileşimin, belirsizliğin varlık, üretim ve dolaşım formları ile nasıl ilintili olduğunu ortaya koymuştur. Piyasa nasıl işler? Piyasalarda belirsizlik ne anlam ifade eder? Piyasa ilişkilerinde belirsizliğin üretimi, temsili, yayımı ve kısıtlayıcılığının rolü nedir? Tez bu soruların izini sürmektedir.

Piyasa ilişkilerinde, kasten ya da tesadüfi, bireyler belirsizlikleri tahmin etmeye, değerlemeye, engellemeye ve nitelemeye (risk ya da zarar olarak) çalışırlar. Bunu yaparken de olasılıklara, bilinmeyenler ile ilgili bilgi seviyelerine ya da belirsizliklerle başa çıkma yetilerine dayanarak belirsizlikleri algılayabileceklerini, ölçebileceklerini ve belirsizlikten kaçınabileceklerini varsayarlar. Bu şekilde, belirsizliğin oluşturucu dinamikleri, kurucu aktörleri ve piyasa yaratımındaki rolü göz ardı edilerek belirsizliğin bahsedilmiş olduğu varsayılır. Bu çalışma ile, belirsizliğin nasıl inşa edildiği ve bu insanın piyasa değişim ve ilişkilerini oluşturmadaki rolü incelenmektedir. Sonuç olarak, ekonomize edilen belirsizlik üretim, değişim, dolaşım, fiyatlama ve politika oluşturmada bir piyasa oluşturma aracı haline gelmektedir.

Tez piyasa reform politikaları ve Türkiye’de tarımsal dönüşümünün analizi ile başlamaktadır. Bir sonraki bölüm, fındığın üretim ve hesaplanma süreçlerini takip ederek fındığın belirsizlik içerisinde nasıl üretildiğini ve ölçüldüğü, yine fındığın hesaplamasında belirsizliğin nasıl yaratıldığını incelemektedir. Devamında, çalışma farklı alanlarda ve farklı beklentilerle yaratılan değişim ilişkilerini ve fiyat siyasetini anlatmaktadır. Bunu takiben, fındığın üretim, dolaşım, değişim ve fiyatlanması ile politika oluşturma süreçleri üzerinde şekillenen piyasa grupları arasındaki mücadele ve tartışmalar irdelenmektedir. Sonrasında, piyasalarda belirsizliğin siyasetinin ne anlam ifade ettiği ve nasıl üretildiği analiz edilmektedir.

Belirsizliklerin takibi ve piyasalardaki oluşumlarının analizi iktisat, siyaset bilimi ve sosyoloji literatürlerini içeren bir araştırma programının izlenmesini gerektirmektedir. Bu araştırma programı materyal şeyler, bireyler, formal ve informal kurumlar ve fiyatlar ile bunlar arasındaki etkileşimler üzerine bir tartışmayı içermektedir. Araştırma 2006 ve 2009 yılları arasında gerçekleştirilen kalitatif görüşmeler, katılımcı gözlemler, vaka analizleri ve belge incelemelerine dayanmaktadır.

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ABBREVIATIONS

DIS: Direct Income Support

EU: European Union

Fiskobirlik: The Union of Hazelnut Sales Cooperatives

IMF: International Monetary Fund

JDP: Justice and Development Party

Mt: metric ton

TGB: Turkish Grain Board

TL: Turkish Lira

WTO: World Trade Organization

USD: US dollars

GLOSSARY

The Glossary contains the main concepts and terms I refer to in the dissertation.

- Alivre:** *A livrer* means “to be delivered” in French. The term is used as *alivre* in the local market. It is used as forward or forward contract in the dissertation. This means a contract placed in one crop season for delivery in the following season. For instance, a forward contract may be created on December 7, 2012 to be provided for delivery in October-December 2013.
- Collective:** The collaboration between specialist and non-specialist as well as between representatives and those they represent in the market.
- Dialogism:** “The ability to facilitate and organize an intense, open, high-quality public debate” (Callon, et al. 2009, p. 178).
- Dialogism, the degrees of:** Adopted from (Callon et al., 2009) as follows: (1) The intensity for composition of a collective between specialist and non-specialist as well as between representatives and those they are represented; (2) The degree of diversity of groups involved; (3) The degree of quality of collaborations and discussions; (4) The degree of the interdependence between the groups; (5) The degree of clarity in implementation; (6) The degrees of equality and transparency
- Emanet:** A kind of exchange between producer and merchant. The exchange starts when producers leave their hazelnuts with a merchant for safekeeping until the time of sale. The exchange completes at the time of sale when producers take their hazelnuts out of safekeeping and sell to the merchant.
- Export price:** The price that is the sum of spot price, processing cost, export tax, export cost and profit.

Formal Institutions:	Formal institutions include firms, state, government, local governments, the Turkish Grain Board (TGB), business organizations [i.e., the Chambers of Trade, the Black Sea Exporters Union, Commodity Exchanges, the Hazelnut Promotion Group], producer's organizations and cooperatives [i.e., Fiskobirlik, the Chambers of Agriculture, the Keşap Hazelnut Producer Organization, the Union of Hazelnut], expert boards, commissions, councils, bureaucratic regulatory bodies), and international institutions (i.e., the IMF, the World Bank and the WTO, the EU).
Forward (<i>Alivre</i>) Price:	The price that is formed in the pre-selling of the product to be delivered in the future at the global level. The calculation of forward price is the same as for the export price. But not every export price is a forward price.
Informal Institutions:	Informal institutions are identified as local networks including market agents on the ground who are merchants, traders, factory owners, crackers (those who own cracking factory), grocers, brokers, exporters and importers.
Market Actors:	Those who are human agents acting in the market.
Market Agents:	The market agents of the hazelnut market include both human and non-human agents. These are the hazelnut plant, primary producers, formal and informal institutions, material and textual devices.
Market Groups:	Those who are specialists and representatives include decision-makers, formal institutions, organizations, firms and those who have the ability to create, control and thus interfere into uncertainty.
Market Price:	The first price in a given day that is executed in the market. This is the first transaction or deal in the market. This price becomes the reference price of the prices that are executed in a day. The market price in market practices is used as spot price in the dissertation.

Pegged Price:	The price at which the forward price is fixed not by agreement (i.e., forward contract), but by an oral promise. With the pegged price, a forward price is fixed based on the possibility of a future event or an expectation.
Rhetorical Devices:	Devices “that consist of reinforcing people’s interests in line with being submitted to some specific directives” (Cooren, 2000, p. 184).
Spot Price:	The price that is formed by the local market actors for the daily exchange between producers, intermediaries, factory owners, crackers and exporters at the local level.
Support Purchase Price:	The price that is declared by Fiskobirlik (1964-2003) or TGB (2006-2009) on behalf of the state.
Uncertainties:	Uncertainties in the amount of crop, the prices, the state policies, the actions and behaviors of sellers and buyers and institutions, the estimations and the informal network relations. Uncertainties include environmental conditions, institutional responses, policy changes and the everyday contingencies experienced by individuals in market formation.
Wagon Price:	The price of 10mt of kernel hazelnuts. Each wagon in exporting has the capacity of 10mt of kernel hazelnuts.
Yield:	The in-fill quantity of hazelnuts. This refers to efficiency and quality.
Yield Price:	The price levels are determined for 1 kg of unshelled hazelnuts with the yield of 50. The yield calculation is made by a visual inspection with a sack of product to see the yield level whether at higher or lower than 50 percent. Any price in the market is declared at the yield level of 50 over 100. The price varies according to the measurement of yield level.

CHAPTER 1

INTRODUCTION

This dissertation analyzes the big problems of market in the small world of the hazelnut exchange in Turkey; the only market Turkey enjoys a hegemonic influence. The dissertation examines production, calculation (i.e. counting hazelnuts and estimating the level of crop), exchange, pricing and the policy-making spheres of the global hazelnut market. The analysis of market making requires an understanding of the politics, actors and institutions involved in shaping the agricultural transformation, and the contradictions and struggles between and within them. This dissertation contributes to the literature on the politics of agricultural transformation and market making with an analysis of the interaction between the market agents and how this interaction relates to the presence, production and circulation of forms of uncertainty.

Since the 1980s, market reform policies have been underway to liberalize economies and to transform the product markets. The ongoing configuration of markets has created a contested and contradictory interplay between market agents. To understand the market and change, market actors generate individual expectations and struggles to develop new strategies while trying to follow the signs of market and the actions of its agents. Classical economists argue that the *invisible hand* and *spontaneous order* ensure market equilibrium even under and despite uncertainty and complexity. Formalists investigate the cultural aspects of markets including risk, and examine the calculative capacity of market actors and technical devices (i.e., computer screens). My research suggests that this is not an effective way to

understand markets and the way they relate to risk and uncertainty.

Friedrich Hayek (1945) identified any intervention into market autonomy and the rational action of individuals as totalitarianism. Against the classical economics, Karl Polanyi (1944) identified economy as a process constituted by institutional structure as a tool to mediate convergence and resistance mechanisms of market forces. For him, self-regulating market was not a reality, but a real political project of liberals.

Since the 1990s, the markets have undergone a rapid transformation with the creation of new institutions, including state institutions, regulatory commissions and expert boards that are assumed to be rational, viable and efficient. The institutionalism has been centered in relation to economic growth and development. North (1990) argues that the political economy of economic development revealed the role of state institutions to enable market policies. Similarly, economic sociologists propose viable institutions to overcome uncertainty and to ensure efficiency and the continuation of market order through social devices (i.e., networks, informal and formal institutions). The Marxist market perspective proposes central planning and institutions controlled by the state (i.e., state banks).

Therefore, the market has become the research interest in economics, sociology, institutionalism and political economy. In these studies, economy is described as social, yet the two spheres, economy and society, are analyzed separately (Polanyi, 1944, 1977). The dichotomy between market and politics is analyzed outside of everyday market making. How market is constructed, and how it works on the ground are not understood by market reform initiators, designers or practitioners.

The studies that attempt to understand the markets examine, for instance, goods, prices, market policies, the roles of institutions or individual behaviors. Actually, the common point of these studies is their focus on uncertainties to be able to examine goods, services, policies, institutions or interactions between them. As such, uncertainties are identified to avoid, prevent or overcome risks; to regulate and qualify probabilities; to predict, forecast and quantify unknowns; or to value and price contingencies. These studies *a priori* assume that uncertainties are given in the market setting. Despite the central significance of the concept, the constitutive role of uncertainty is largely ignored. Little attention is given to what uncertainty means, its role in the market setting, or its making.

Çalışkan and Callon (2009a; 2009b) identified the complex process of market making as *marketization*, through which constructing markets become one particular form of *economization*. This is the process in which markets are constructed. The process of marketization does not assume markets exist as permanent constructs and as single entity. As such, the outcome of this process is not taken for granted. Instead, the process entails contested and controversial forms of encounters between goods and calculative agencies, between different price forms, and between formal and informal institutions, which are in constant interaction with each other. The interaction also entails technical and material components and produces textual and rhetorical devices to enable and maintain the market.

The dissertation examines how uncertainty becomes a tool of market making and how uncertainties constitute the market. Based on the definition of “market device” as “a simple way of referring to the material and discursive assemblages that intervene in the construction of markets” (Muniesa et al., 2007, p. 2), in the

dissertation, uncertainties are taken as devices to maintain the market. How markets are designed within these complex processes of marketization and how uncertainties are produced, used, and circulated are the central topics of this dissertation.

The socio-technical controversies that signify the social and technical aspects of the market are what the dissertation will examine. The attempt to reveal the socio-technical controversies is based on the analyses on how markets are designed and how market organization becomes the outcome of a complex process that includes market agents and their interactions.

In the socio-technical controversies, while the social aspects signify, exchange relations, measurement, manipulation, speculation, negotiation and social interactions, the technical aspects include material things, production, calculation,¹ valuation, pricing, and policy creation. The dissertation analyzes how uncertainties are produced, disseminated, and circulated through these controversies and encounters between market agents. As such, the constant interplays between the market agents feature the struggle of each agent to sustain its position in the market setting. This also influences how the market maintenance by each market agent is coordinated and organized in specific ways (Callon, 1998).

The dissertation reveals that socio-technical controversies do not create a local market environment that is envisaged by classical economics featured by pure market rationality. The dissertation argues that market processes comprehend uncertainties, which generate vulnerabilities to crises through which the change entailing

¹ In the studies on the anthropology of calculation, calculation is identified the activity that is performed by calculative agents who enable the process in which entities become calculable commodities. According to Callon and Muniesa (2005), "in order to be calculated, the entities taken into account have to be detached" (p. 1231). Therefore, the entities (i.e. hazelnuts) are made calculable and subjected to manipulations through data and numbers. The dynamics of the process and politics of calculation will be analyzed in the Chapter 3.

uncertainties, transform the exchange relations and disintegrate the networks and isolate the individuals from the socio-technical controversies.

Callon et al. (2009, p. 119) identified two spheres of uncertainty, which are uncertainties “concerning our knowledge of the world” and uncertainties “affecting the composition of *a* collective” [*emphasis added*]. These concepts are adopted in the dissertation. First, the uncertainty in relation to the knowledge of the world is related to the asymmetry between specialist and ordinary citizens in terms of unknowns and the creation of unknowns. This is indisputable knowledge created by the market groups. Second, the composition of a collective is related to the elimination of asymmetry between market groups in the creation of a collective, which is the collaboration between specialist and non-specialist as well as between representatives and those they represent in the market. Therefore, by a *collective*, I refer to collaboration between specialist and non-specialist as well as between representatives and those they represent in the market.

The dissertation analyzes the limitations of collaboration with the concept of the degree of dialogism. Specialists, experts, representatives, spokespersons and politicians are delegated to produce knowledge (Callon et al., 2009). With *dialogism*, I mean “the ability to facilitate and organize an intense, open, high-quality public debate” (p. 178). With weak dialogic procedures, the market lacks a common domain where the socio-technical controversies generate destructive uncertainties, rather than productive, and exclude the emergence of new identities and minorities (i.e., small producers). Beyond the institutional procedures and beyond dialogic negotiations and bargaining within the institutions, weak dialogism prevents the emergence of new groups and identities. Therefore, the dissertation revealed that the weak degree of

dialogism among market groups creates destructive uncertainty.

The dissertation found that the hazelnut market is constructed on the categorization between producer and business groups, by formal institutions that include business and producer organizations (i.e., chambers, unions), their representatives and spokespersons. Despite of this categorization, the dissertation revealed the asymmetry between specialist and non-specialist as well as between representatives and those they represent (Callon et al. 2009). Those who are specialists and representatives include experts, decision-makers, formal institutions, organizations, firms, and those who have the ability to create, control and thus interfere into uncertainty. Throughout the dissertation, these groups were identified as *market groups*. Those who are non-specialist and those who are represented include producers.

The analysis of the hazelnut market constitution revealed a profound impression of the market agents on the uncertain processes of market making. Uncertainties include environmental conditions, institutional responses, policy changes and the everyday contingencies experienced by individuals. Therefore, by *uncertainty*, I mean uncertainty in the amount of crop, the prices, the state policies, the actions and behaviors of sellers and buyers and institutions, the estimations and the informal network relations.

The dissertation reveals two types of uncertainties with which the market actors have to cope: radical and constructed uncertainties. First, the radical uncertainty is related to environmental conditions, the unknowns about the crop level, production and environmental conditions. Since the agricultural production depends on environmental conditions (Backus et al., 1997; Saha et al., 1994;

Williams et al., 1990; Sumner et al., 1998), no one can calculate, predict, and prevent what will happen. Second, the constructed uncertainty is related to the exchange relations, the market encounters, the controversies between market groups and the exclusion of producers from the decision-making processes. The constructed uncertainty renders the market actors disabled. Institutions are open to manipulation through misinformation and rhetorical devices and these contribute to speculation with unreliable statistical data.

In light of this introduction, the dissertation identifies uncertainty not only as unknowns, but as deprived of the ability to interfere into uncertainties by creating, manipulating and managing them. Similarly, Marris (1996) identifies such interference as “the ability to maneuver in the face of uncertainties often at the expense of others whose power is less” (p. 1). Uncertainty is not only the risk that market groups aim to eradicate. Uncertainty is a tool to make the market as well as to maintain its making.

The dissertation analyzes the mechanisms that construct the market and the hidden aspect of the change, as well as the market and policymaking processes that exclude producers. The lack of micro-decisions leads to uncertainty on the ground among the producers. Therefore, the dissertation analyzes the submerged part of the iceberg by examining the controversies and the market making and their implication on the market agents.

The market agents of the hazelnut market include the hazelnut plant, primary producers, formal and informal institutions, material and textual devices. Formal institutions include firms, state, government, local governments, the Turkish Grain Board (TGB), business organizations (i.e., the Chambers of Trade, the Black Sea

Exporters Union, Commodity Exchanges, the Hazelnut Promotion Group), producer's organizations and cooperatives (i.e., Fiskobirlik, the Chambers of Agriculture, the Keşap Hazelnut Producer Organization, the Union of Hazelnut), expert boards, commissions, councils, bureaucratic regulatory bodies), and international institutions (i.e., the IMF, the World Bank and the WTO, the EU). Informal institutions are identified as local networks including market actors on the ground, who are merchants, traders, factory owners, crackers (those who own cracking factory), grocers, brokers, exporters and importers. Material and textual devices include rhetorical devices such as reports, press release, connotations, verbal expressions; producer *carnet*;² hazelnut purchase specifications; and measurement technique.

The introduction chapter is structured as follows. The first part of the chapter includes the literature review in which the arguments of each theory are explained in order to understand how these theories study markets, how they treat uncertainty and what kind of political organization they prescribe in market making. Following the literature review, the reasons for choosing the hazelnut market as a research unit are provided. The next part explains the research design and the fieldwork. The last part concludes with the brief summary of the empirical findings.

² The TGB purchased hazelnuts on the basis of the formal document, called carnet, in which the personal information of the producers and the technical information of their hazelnuts were recorded. The term is also used in informal relations between the merchants and producers. The merchants create an informal document, also called carnet, for each producer to record the dates and the cash amount given to the producer.

Literature Review

The literature review explores the main theoretical concepts and discussions with the aim to create a comprehensive framework for understanding how the market is studied. The market has been studied according to different theories and each theory provides different tools and methods in its understanding of market and its constituting mechanisms. First, the literature review starts with a discussion of classical economics in terms of the main concepts of rationality, individual freedom, equilibrium and market universalism. Second, the section analyzes institutionalism in relation to the role of the institutions in market making and the concepts of efficiency, transaction cost and complexity as well as delegative democracy. Third, the section presents the Marxist theory to provide an understanding of production and class relations in relation to the concept of economic democracy. Fourth, the new economic sociology is reviewed as a changing perspective in the sociology of markets as regards to embeddedness and social devices. Fifth, the section includes hazelnut-specific studies in relation to their understanding of product markets. Then, the section includes the analysis into the processes of market making that challenges the conventional literature that takes the markets for given. The last part of the review explains how markets will be studied throughout the dissertation.

The Classical Economics and Formalist Approaches

The tools and concepts initiated by classical economics have created the main principles of market universalism and the assumption that a set of market prices

ensures the “equality of supply and demand in all markets” (quoted from Kaufman, 2007, p. 6). Classical economists, who argue that efficiency and economic growth will be achieved in a self-regulating market with free market principles, propose that any intervention other than market dynamics causes supply-demand imbalances (Smith and Balassa, 1986; Becker, 1976; Marshall, 1982). This section analyzes classical economics in three sections. First, it examines how market logic is envisaged as universal, and how market equilibrium is designed as the constitutive of classical economics. Second, it explains how individual freedom is assumed to be politically set as the principle of spontaneous order. Third, it explores how uncertainty is identified as risk and probability, which are assumed to distort the so-called market equilibrium. The section concludes with the contributions and limitations of the classical economics.

Market Universalism and Market Equilibrium

Classical economics are derived from the idea of economic man and identifies market agents as rational individuals who aim to maximize their utility and individual self-interests. The focus of classical economics aims to create tools of alternative resources to meet the endless individual wants under the conditions of scarcity. LeClaire and Schneider (1968), applying a purely economic logic, argue that economic tools can be used to study human behavior as a relationship between ends and scarce means.

Market universalism constitutes the formalist tradition of the economic anthropology³ (Robbins, 1962; Samuelson, 1967). Formalism is originated from the study of economic behavior in Western societies and how economic action maintains social systems (Schneider, 1974). Firth (1967) identifies the difference between primitive and capitalist economies and relates social relations to economic relations. LeClair (1962: 1185) conceptualizes non-Western economies as focusing on material goods and services yet in a purely theoretical view of economics based on a “special case.” Similarly, Firth (1967) asserted that economic relations and the choices form a system in every society, and thus, exchange relations are fundamental in all human societies. This is an approach also shared by LeClaire and Schneider (1968), and Plattner (1989), who analyze all societies as unique and attempt to adopt a simple classification of societies as primitive, peasant and industrial. Therefore, it is assumed that individuals in both capitalist and pre-capitalist economies behave in similar ways (Schneider, 1974).

Rather than a purely materialistic stance, Cook (2004) offers a working balance between economic quantities and socio-cultural and ecological context. Regarding the dichotomy between material and social sphere; Cyril Belshaw (1965), Richard Salisbury (1962), and Fredrik Barth (1967) focus on social exchange in relation to the material sphere with the idea that the material sphere cannot be understood without analyzing the social sphere that dominates the economic system. In that sense, economic phenomena are taken for granted in every economic system at the

³ The economic anthropology approach is constituted by a variety of traditions that study local markets and economic relations. It benefits from two main traditions, which are liberal (formalism) and institutionalist. In particular, the liberal tradition originates from classical economics based on the assumptions of individual maximizing behavior. The institutionalist tradition, on the other hand, is divided into substantivism and Marxist tradition. Despite their common research area on the relations of production, substantivism examines the social relations of economies, whilst Marxist tradition observes the capitalist relations of production (Schneider, 1974).

same time by focusing on the social side of the equation. Therefore, the core idea is that the form of the society is related to the form of its economy.

According to classical economics, any factor that creates imbalance in the equilibrium needs to be removed (Marshall, 1920 [1961]). As such, it is assumed that, in a perfectly functioning market economy, prices are responsive to supply and demand without any non-market intervention to assure maximum growth and development. Therefore, the price becomes a rational mechanism for the communication and coordination of market actors (Hayek, 1945 [1948]).

The basis of the classical theory is the movement toward or around a certain point of equilibrium to reach the efficient allocation of resources. Studies on the equilibrium seek the reasons for the distortions (Van Daal and Jolink, 1993; Marshall, 1920 [1961], Harrison, et al., 2009; Lachmann, 1986; Davidson, 2004), and the factors of its stability and inefficiency (Fama, 1970). The shift in the equilibrium is related to irrationality or bounded rationality as well as the lack of information or asymmetric information (Campbell and Kyle, 1993). Despite the assumption of perfect and continuous equilibrium given by classical economists, Kaldor (1972) points out the irrelevance of market equilibrium by arguing that there are differences between production and consumption.

Spontaneous Order and Individual Freedom

Classical economics argues the separation between market and politics to ensure the complete removal of any state intervention in the market. In the 1980s, the principles of classical economics were refashioned globally and defined as the Washington

Consensus with the aim of restructuring the role of the state, delimiting welfare state practices, and achieving economic growth through privatization. These policies intended to elicit the idea of the *invisible hand* of the market with the maintenance of minimal state intervention.

In a given economic system, which Hayek (1973) conceptualizes as a *spontaneous order*, any intervention into the actions of rational individuals is associated as totalitarianism with the assumption that every action that prevents rational behavior will result in market distortions. Therefore, according to Hayek, the state institutions have to protect individual freedom. As such, Hayek envisages a strong government to devote its power to advance the common interests of its citizens, *citizen sovereignty*. The term *common* does not mean the will of the majority that is the artifact of the existing institutions (Hayek, 1973). He writes, "... if we consider the situation in a community in which the mass of the people are in favor of a market order and against government direction, but, as will normally happen, most of the groups wish an exception to be made in their favor". What he identifies as the "root of the evil" is the "unlimited power of the legislature in modern democracies" (p. 10).

On the contrary, Polanyi (1944) refers to the limits of individual freedom and writes, "We cannot achieve the freedom we seek, unless we comprehend the true significance of freedom in a complex society" (p. 254). At that point, Polanyi argues the danger of the institutional separation of politics and economics against the substance of society.

Regarding industrialized Western societies that confront the welfare state crisis at the global level, the concept of individual freedom was related to the discussions

of welfare state practices. As a critique against the liberal democracies, Habermas (1998) points out the equality and justice in the deliberation of citizens rather than the individual freedom of the possession and acquisition of private property. With globalization, the impact of individuals on the market mechanism becomes limited as the market mechanism resists where the natural law principles are applied. Therefore, the democracies of the liberal and welfare state paradigm cannot be viable in complex societies where law is interwoven with economy, state and social life (Habermas, 1976).⁴ Accordingly, Habermas (1996) proposed a proceduralist understanding of law under which a communicative action fills the gap between public and private spheres.

Uncertainty: Risk, Probability and Unexpectedness

The studies on uncertainty are varied in the economics literature (Perlman and McCann, 1996). In classical economics, Adam Smith refers to uncertainty in terms of the probability or improbability of success (Smith, 2000). Alfred Marshall relates uncertainty to probabilistic risk and certain expectations (Marshall, 1920 [1961]). The economists examined the term risk in relation to mathematical formalism in econometrics, financial calculations, game theory, model and data uncertainty (Reiss and Cartwright, 2004; Minsky, 1982; Neumann and Morgenstern, 1944; Brainard, 1967; Levin et al., 1999; Gerdesmeir et al., 2002).

The classical approach describes uncertainty as dispersion or distortion from equilibrium (Van Daal and Jolink, 1993, p. 73-74; Pigou, 1952 [2002], p. 771-776).

⁴ The regulations of the state and economy through welfare policies intervene into the informal structure of the social life (Deflem, 1996).

As such, uncertainty is related to unexpected events, disturbances that turn into contingencies and risks. What the classical account proposes to overcome these contingencies is a self-regulating system that eliminates and corrects these disturbances only into the long-term equilibrium (Marshall, 1920 [1961]; Harrison et al., 2009).

In relation to the discussion on rationality and optimization, what is important in the approach of the classical economists is their methodological approach formulated through economic models in order to attempt to describe the measured consequences of an interacting, complex and measurable events (Williamson, 1975). With this inclusion of mathematical formulation into economics, classical economists aim to facilitate prediction.

However, classical promise was challenged in relation to the equilibrium maintenance. Knight (1921) originates the distinction between “quantifiable risks” and “unknown uncertainty” in economic decision-making by distinguishing risk from uncertainty. Keynes defines uncertainty as an “unknown probability.” As such, according to Keynes (1927), risk, uncertainty and ignorance are identified as the causes of the collapse of the laissez-faire system, which necessitates state intervention. The degrees of uncertainty are taken as equivalent to degrees of probability (Keynes, 1921) in relation to risk calculation. As such, the concepts of unknowns and risk are identified to understand uncertainties.

Contributions and Limitations

Classical economics founded the main principles of the constitution of the market system and design. The concepts of supply and demand, equilibrium and market universalism became the constitutive principles of economic liberalism and neo-liberalism. In different social disciplines, classical economics has become the dominant theory both in analyzing and designing societies. Especially since the 1990s, the liberal market reform policies have been laid into the principles of the classical economics in terms of the removal of state intervention and the state support mechanism. The aim is to eliminate any intervention that has a possibility to distort the so-called market equilibrium.

Uncertainty is also treated as one of the market distorting factors in terms of the probability and risk calculation. Therefore, the struggle is to maintain the market equilibrium. However, this struggle is more than a simple interaction between supply and demand as it is assumed in economic models. Rather, it implies the encounters between the individuals, the negotiations and controversies that create uncertainties. Within these controversies, uncertainty entails more than risk, probability and unknowns.

What is revealed by formalists is the analysis of the market within a cultural context (Çalışkan and Callon, 2009a). Although formalism provides an intense conceptual contribution to studying the markets, the analysis of social realities as uniform entities without analyzing the local market dynamics excludes local considerations, interactions and implications. Therefore, what classical economics disregards are the factors and the dynamics of constitutive and maintenance factors

of the equilibrium and its perception. These factors are derived from the models of economics.

As the social implications of purely economic logic are ignored in the methods, the tools and models of the classical economics, the absolute market dominancy and market logic is vulnerable to become “contested, illegitimate sources of inequity and injustice” (Callon et al., 2009, p. 238). This type of market structure eliminates the constitution of a market collective between supply and demand forces. Although individuals are assigned to individual autonomy to act and decide rationally, classical economics only consider the role of government from perspective of the market and individual freedom. As such, the separation of politics and markets and the idea of market dominancy result in the retreat of the social implications of market logic. Moreover, under the principles of formalism and market universalism, as classical economics assumes the equal opportunity of each individual, the substantive studies on market have revealed the limitations of these principles.

Therefore, the classical economics and formalist assumption of market universalism has been discussed largely in substantivism (Polanyi, 1944). Substantivism argues that the study of markets in “non-Western contexts” requires the examination of the local relations of exchange, which are embedded in various socio-cultural settings, whereas in the West the market has become mostly disembedded (Polanyi, 1977; Polanyi, et al., 1957; Dalton, 1961, 1967 [1981]; Sahlins, 1965, 1972; Halperin, 1977, 1984). The substantive definition of Polanyi refers to the focus on material needs and means and defines the economy as a process that sustains social continuity that is socially structured and institutionalized. The old institutionalism of Polanyi has been revisited by neo-institutionalists who analyze

formal institutions by adopting the concepts of property rights and contractual enforcement. The next section analyzes institutionalism.

Institutionalism

Institutionalism is discussed in three parts. First, institutionalism is examined in regards to the interaction between market and institutions and the argument that efficient institutions ensure economic growth. Second, the section examines how the institutionalists consider uncertainty as a transaction cost that needs to be eliminated through institutions and firms. Third, the concept of delegative democracy is discussed in relation to the roles of institutions and the state.

Markets and Institutions

The institutionalist approach analyzes institutions as tools to increase efficiency and growth in both political and economic activities (North, 1990; Apeldoorn, 2001; Leibfried and Pierson, 1995; Walker, 2004; Little and Watts, 1993; MacCartney, 2011)⁵ as well as “negotiated economy,” including the institutions to overcome global competition to create a “new economic common sense” (Campbell and Pedersen, 2001). Regulatory institutions are emphasized as tools to maintain and sustain the market mechanisms and enable the market order.

⁵ These institutional insights might also be observed in Turkey’s institutional transformation during the 1990s in light of the IMF and World Bank reform packages that involved governance reform (Altuğ and Filiztekin, 2006; Bakır, 2005; Öniş and Alper, 2004). In particular, these reforms proposed an interaction between public and private actors through which private actors were involved in the public sphere as a kind of new social (İslamoğlu, 2002). The main motive of this new social, namely transnational actor might be identified within new governance mechanisms in order to implement reforms imposed by supranational institutions.

In institutionalism, the politics of market making are argued in relation to the role of the transformation of the state and the close interaction between the centrally planned economy and market mechanisms in order to ensure the efficiency and equality in marketization (Liu, 1997). The empirical foundations of this approach have been established in various studies in the literature.

Within the institutionalist tradition, Pranhab Bardhan (2006) included a variety of statistical calculations. He proposed the unequal development thesis that, against the proposition of the classical economists, economic growth has not solved the dilemma of inequality in developing countries; and even has aggravated the problem.⁶

Institutionalism analyzes the market from the point of view of classical economics in relation to market failure and distortions to ensure the market order. The institutionalization of the market is also analyzed through social policies (Rogowski, 2008). For them, governmental failure is more difficult to get rid of than market failure (Chang, 2002). While studying the markets, institutionalism identifies different historical configurations of institutions and the market design of capitalism (Hall and Soskice, 2001). In light of this literature, one might say that the institutionalist approach identifies the economy not as a natural mechanism, but as a social organism (Kaufman, 2007, p. 11; Zafirovski, 2002). Similarly, these insights might be related to the approach that suggests a “socialized” view of economic behavior through which a multidisciplinary and historically dependent analysis is

⁶ This stance on state intervention with market tools taken also by Anne Krueger (1974) who proposed, with the evidence of numerical calculations, that rent-seeking behavior reduces economic efficiency. Certainly, the author pointed out, in the period of import substitution industrialization in Turkey, the sum of quota restrictions imposed by the state and welfare costs has been equal to the sum of equivalent customs tax and rent rate.

applied (Leibfried and Pierson, 1995). Also, the approach gives emphasis to the formal rules and institutions surrounding markets (Streeck, 2005, Kaufman, 2007).

Uncertainty, Complexity and Transaction Cost

In the 1970s, institutional economics revisited the transaction cost approach, which includes the analysis of the costs of search and information, bargaining, enforcement (Coase, 1937; Williamson, 1975). Accordingly, the transaction cost approach extends its scope into bounded rationality (Simon, 1991), and rational choice (Coleman, 1990; Becker, 1976; Lindenberg, 1990). Transaction costs are identified as obstacles to market development and it is thought that the removal of these costs leads to economic growth. Stable sets of regularized exchange relations create a set of trading partnerships (Cook and Hardin, 2001) and reduce transaction costs and risk (Lincoln et al., 1992). Williamson (1975) analyzes organizations and the costs that are associated with transacting; and identifies internal transactions within the firm and external transactions in the market. He argues that market and hierarchies prevail when they economize on transaction costs.

According to institutionalists, due to incomplete and imperfect information, uncertainty necessitates properly and efficiently functioning institutions to adopt strategies and make decisions (Commons, 1950). Uncertainty is related to complexity, unknown and bounded rationality (Williamson, 1975; North, 1990; Simon, 1991). Similarly, uncertainty is related to the lack of knowledge that creates “situations in which even economic maximizers, rational economic men, have their economic decisions substantially influenced by noneconomic factors” (Cancian,

1980, p. 1). Moreover, uncertainty exists “where knowledge is inadequate and where no established procedures of management exist” (Boholm, 2003, p. 168; Cashdan, 1990).

Uncertainty occurs due the valuation and prediction of the future (Commons, 1950). According to Williamson (1975), uncertainty is the result of strategic opportunism and bounded rationality as well as the inability of decision makers to apply economic theory in a given decision.

Therefore, from the perspective of institutionalism, institutions are addressed as a way to cope with uncertainty and its results. Institutions are necessary to force economic agents to adopt strategies and make decisions (Guseva and Rona-Tas, 2001). Uncertainty and unpredictability “can be controlled somewhat by insight and collective action” (Kaufman, 2007, p. 21). In these definitions, this is uncertainty as a kind of transaction cost to be overcome through the creation of institutions and trust (Williamson, 1975).

Furthermore, in the early 1990s, institutionalists studied the reasons for the financial crises (i.e., the Dot-Com bubble) and analyzed the role of institutions and professionals and the irrational exuberance (Lowenstein, 2004; Stiglitz, 2003). Lowenstein (2004) examines the impacts of the changes in corporate governance (i.e., the role of the CEO and company boards) on the crisis. These studies reveal that the crash was caused by deregulation, short-term focus of institutions, and misinformation. More importantly, these studies are significant in terms of their analysis of the manipulative role of institutions in creating uncertainty.

Delegative Democracy and the Enabling State

Throughout the 1990s, institutional transformation became problematic for transition and emerging economies. At that time, Douglass C. North emphasized the relationship between institutional transformation and economic growth. He (1991) defines institutions as “the humanly devised constraints that structure political, economic and social interaction. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights).” The categorization of institutions as formal and informal is based on the assumption that informal institutions (“i.e., local networks of informal constraints that facilitates local exchange”) require formal ones (i.e., “state that enforced contracts”) to secure transactions, minimize the transaction cost, and ensure efficiency (p. 97-99).

According to the institutionalists, markets can operate effectively only if regulated by the appropriate institutions. In that sense, appropriate and “suitable” institutions are recognized as a way of development for developing countries on the basis of free trade with an active and enabling government. The governance perspective refers not only to rational choice approach, but also to social ties such as alliances, trusting partnerships, long-term relationships, friendships, and informal patterns of reciprocal obligations (Nooteboom et.al, 1997). Therefore, the role of governance mechanisms in terms of responsibility, transparency, rule of law and accountability become significant in institutional transformation that aims at efficiency and economic growth (North, 1990).

Formal rules are created and executed by the delegates and representatives of

the institutions (i.e. Fiskobirlik, the Chambers of Agriculture, the National Hazelnut Council). O'Donnell (1994) identifies strong and weak institutions when he discusses the concept of delegative democracy with weak institutions. The weakness is identified as the weak type of horizontal responsibility in delegative democracy. The delegates are not (horizontally) accountable, but responsible in the making of market policies.

Delegative democracy is treated as individualistic in a Hobbesian way in which the president is not forced to execute horizontal accountability. The role of the president is also the case in organizations and unions where presidents who are delegates, representatives and spokespersons of the organizations (i.e., producer and business organizations, chambers and unions) have autonomous roles in decision making and representation.

In delegative democracy, individualism is based on rational actors and the “values and beliefs of officials (whether elected or not) embedded in a network of institutionalized power relations” (p. 62). Within delegative democracy, where resistance is ignored, problems are solved by technical criteria (i.e., economic policy). This is also the case in agricultural reforms and market policies, which will be discussed throughout the dissertation.

Contributions and Limitations

Bates (1989) criticizes the classical economics for two reasons. First, the classical economics approach does not probe institutions; hence, he considers this as their “failure to adequately deal with institutions.” Second, the approach disregards

institutions as areas of decision making and power struggles “to analyze politics” within institutions as well as by institutions. Institutionalism analyzes institutions in relation to their role of enabling the market. As regards the role of the government, the political failure is as important as market failure, as a reference to the dichotomy between politics and markets, as in the perspectives of the institutionalists and the classical economists, respectively. The attempt to achieve economic growth through efficient institutions is the main point of the institutionalism that complements classical economics in a way that institutions become the agents to construct the market (Çalışkan and Callon, 2009a).

The four main limitations of institutionalism are as follows: First, institutionalism analyzes the market and its interaction with economy and society (Zafirovski, 2002); however, they do not take into account how the market works on the ground and how concrete markets are constructed (Çalışkan and Callon, 2009a). Second, institutionalism ignores informal institutions and the interaction between formal and informal ones in market making. The competitive interaction between formal and informal institutions reveals the role of informal institutions in constituting and maintaining the market. Therefore, the institutional analysis is reduced to formal institutions.

Third, the political economy of institutional struggles is the main focus of institutionalist research in order to provide a better market design (i.e., liberal market). However, the institutionalist account becomes delimited to uncover the implications of the institutional and power struggles. The implication is uncertainty created through institutional struggles. This is an approach shared by social construction theorists, who note the inefficient, ineffective and contingent nature of

institutional struggles, the outcomes of which can be derived from the institutional context itself (Hay and Wincott, 1998). He argues that it is “ideas” not “institutions” that reduce uncertainty, especially in periods of crisis. Accordingly, he says, “the diagnosis of a situation as a crisis by a particular set of ideas is a construction that makes the uncertainty that agents perceive explicable, manageable and indeed actionable” (p. 10). However, it is not explained how such a construction is achieved.

With institutionalism, the uncertainty revealed during the struggles is largely ignored in understanding the constructed uncertainty. Although the studies on uncertainty identify power inequality (Cook, et al., 2002) and direct or indirect on-going relationships (DiMaggio and Louch, 1998), these studies provide a formalist perspective according to which the rational estimations of unknowns are based on accurate numbers, statistics and forecasts. Also, these studies do not consider how unknowns are constructed. This is uncertainty as a kind of “manufactured uncertainty,” as “the outcome of long-term maturation of modern institutions” in relation to “manufactured risk” which is “a result *of* human intervention into the conditions of social life and into nature” (Giddens, 1994, p. 4). Williamson (1975) identifies uncertainty as transaction cost and complexity; as such, uncertainty is taken for granted as an end-result of a transaction.

However, the concept of economizing transaction needs to be revisited in terms of economizing uncertainty not only within organizations and market hierarchies, but also in other spheres and actors of market making. Uncertainty is studied as a result that leads to opportunism or competitiveness. However, uncertainty needs to be addressed as a concept of its own in the processes of market making and as the constitutive of the market and the implication of institutional struggles.

Fourth, where institutionalism remains silent is in the area in which institutional struggles exclude ordinary individuals. The asymmetry between specialist and non-specialist and the problems of double delegation in formal institutions need to be examined (Callon et al., 2009). Also, institutionalism ignores how the markets are constructed as well as the constitutive of the contested nature of the processes of market making. Since market actors are involved in several convergence mechanisms, a Polanyian dynamic double movement as a constant negotiation between the market and society might be re-conceptualized as a challenging, transforming and reconstituting mechanism that shapes the market formation.

Marxism and the Market

Marxist theory is grounded on the concepts of unequal exchange, surplus creation of capitalist class based on surplus labor power extracted from the working class.

Marxist theory essentially perpetuates the idea that what classical economists put forward as division of labor and specialization is associated with class exploitation.

This approach essentially presents a conception of class analysis that asserts that the social relations of production constitute the initial condition that determines

individual's class integration (Milios, 2003).⁷

⁷ According to the class perspective, power is identified as class power, which is the power of one class or a coalition of classes, of the ruling class, or the dominated classes of society. This power is assumed to be reproduced within class antagonism, within the struggle of the classes. In that sense, the Marxist approach proposes that the specific unity of society is inseparable from the unity of the specific class power, which is insured within the class struggle (Balibar, 1988, in Milios, 2003). Çağlar Keyder (2003) explains the role of state policies in distributing economic surplus in a desirable way in order to end the crisis of import substitution industrialization. Accordingly, in this crisis, some groups faced with disadvantaged positions, due to not only the mechanism in which the state economic enterprises provided transfers to the private sector, but also the inflated value of the Turkish Lira. The increasing value of the currency damaged, for example, farmers who produce export

The Marxist Tradition of the Economic Anthropology

The Marxist analysis of market in economic anthropology was originated by Dupré and Rey (1973), and Meillassoux (1972). They reject the interpretation of economic systems based exclusively on forms of exchange, based on the models of Bohannan and Dalton (1962) and Polanyi (1944). The Marxist analyses in economic anthropology reflect the heterogeneity within the frameworks of institutions and historical processes in pre-capitalist and capitalist societies. The Marxist approach analyzes the relations of production and exchange as separate spheres. Frankenberg (1967) argues that the starting point of economic anthropology is the social aspects of production. Similarly, the social change and the weakening of reciprocity are associated with production relations, in which several types of interactions are presented between landowners and tenants as well as between merchants and producers.

According to Clammer (1978), the Marxist tradition in economic anthropology fills the gap between the analysis of the workings of international capitalism at a general level, and the implementation of detailed studies of the operation of these forces at a truly local level in indigenous contexts. This stance is taken also by Godelier (1977, in Dilley, 1992), who refers to the distinction between production and circulation by saying that “despite an apparent similarity between forms of marketing and circulating goods, the very mechanisms of this circulation ... are

products, whereas importers gained high profit (rent) by selling imported products in the domestic market with foreign exchange that they acquired in official exchange rate. This distinction provides an understanding of how unplanned and rent-seeking interventions have led to the increase in the burden of the state economic enterprises on the public budget. Likewise, Stephan Haggard (2000) combined domestic societal and state centric approaches with the density and composition of interests groups and then argued how they shape policy outcomes via state institutions. He generated a new political economy approach to inflation and stabilization that included interest groups models and cost or benefit of rent-seeking behavior into the explanations on taxation and expenditure.

different, and this difference is based on the necessity for the various forms ... being compatible, functionally and structurally, with the dominant condition of production and ... of reproducing these modes of production” (p. 12).

The Agrarian Change and Peasantry

As regards the Marxist approach to agricultural development and namely agrarian capitalism, there is also an extensive theoretical and empirical literature on production relations in agriculture (Kennedy, 2006; Brenner, 1985). The most relevant Marxist approach to relate to capitalist production relations and their changes in agriculture is the historical materialist approach of Ellen Meiksins Wood (1999) and her assertion on the historical relation between capitalism and the nation-state. Relating the imperatives of capitalism such as competition, accumulation, and profit maximization to changes in the capitalist mode of production, she refers to the dispossession of peasants by providing a class perspective of those who work the land and those who appropriate the labor of others. Although she identifies the different modes of appropriation, she defines one general characteristic, that the direct producers are typically peasants who possess their own land.

However, Wood alludes to the difference between all pre-capitalist societies and capitalism in a way that, in capitalism, the surplus appropriation is based on the dispossession of the direct producers whose surplus labor is appropriated by market imperatives. In that sense, the shift from primitive production to capitalist accumulation of capital is based on the separation of producers from means of production and the acquisition of the tools of production by the capitalist class.

With the integration of product markets across countries, Eric Wolf and Sidney Mintz (1957) postulate the integration of individual producers into the global market processes. Integration is identified with the interaction between rural populations (i.e., individual producers) and the dominant sectors (i.e., market groups) of society, and also, the interaction between the producers and the state within economic and policy processes as well as their impacts on the local people. In this transformation, the local structures are associated with the resistance mechanism, such as “petty commerce, transportation, commodity production, rural wage labor and migration, against threats produced by the unequal power relations between both spheres” (Schüren, 2003, p. 48). This transformation is analyzed widely in relation to the transformation of rural life and the concept of peasantry.

Market Socialism and Economic Democracy

In Marxist theory, the debate on the market is discussed in relation to the divergence between socialism and market socialism. While Ticktin (1998) and Ollman (1998) identified market as incompatible with socialism, for Schweickart (1998) and Lawler (1998), non-market means of socialism make economy unviable. The dissociation between these two is based on different understandings of markets.

When Schweickart (1998) defines three constitutive institutions of capitalism, which are market economy, private ownership of the means of production and wage labor, he does not identify market solely with capitalism. Accordingly, a non-market understanding of capitalism creates inefficient and undemocratic form of central planning. Therefore, he proposes a market socialism that eliminates or restricts

private ownership and substitutes for it some form of state or worker ownership to be economically viable and preferable. As such, it is assumed that socialism is not viable without the market; thus, market socialism is viable. He calls his model of market socialism *economic democracy*. The model proposes the state-owned means of production, labor-managed firms, social control of investment and a market for goods and services (Schweickart, 1993, 2002).

The concept is also studied in relation to the asymmetry between social and economic relationships. In case studies, the asymmetry is related to political democracy, on the one hand, and economic democracy, on the other hand. The social dialogue, with ethical considerations, envisages dialogue among diverse sectors of the economy (Chaves, 2002; Johnsen, 2005).

Lawler (1998) proposes an economy based on cooperatives rather than a planned non-market economy. However, Ollman (1998) counters that the market experiences in the exchange of goods, capital, labor and currency create market ideology. For him, “market mystification” generates the same model of market economy where the profit maximizing interests of individuals are not different from the interests of a collective. He identifies the term *mystification* as follows: “By ‘mystification’ I am referring to the kind of broad misunderstanding that results from the combination of hiding things, distorting them, misrepresenting them, confusing them, and occasionally simply lying about them. All these processes are to be found in the operations of the market.” (p. 85). While discussing the operations of the market, he recalls that “whatever is exchanged must have been produced” (p. 86). Therefore, the research unit becomes the conditions of production.

In market socialism, the market, as a unit of analysis, is taken in terms of

property relations. Although market socialism tends to understand how the market works, the market is analyzed within the network of property relations. Schweickart (1998) writes that for that classical economist, “It is easy to attack the abstract markets and to concentrate on the virtues of the market ... They obviate the need of looking closely at how the market might work when embedded in network of property relations different from capitalist relations.” (p. 11). Nevertheless, market socialism analyzes the market within different spheres of the market by separating production, exchange, distribution and consumption from each other.

Contributions and Limitations

Marxist theory is vital in analyzing the shift from gift to commodity exchange as well as in understanding the agrarian change in relation to production and land relations. For Malinowski (1922) and Mauss (2002), exchange constitutes not only material value, but also social value through reciprocal relations. The exchange of a material gift (i.e., pre-financing) might create a social value in a reciprocal relation (i.e., protection). The informal network relations in the market are constituted by reciprocal relations. The informal networks are created by class power through gift exchange. The capitalist class provides material gifts in exchange for gaining trust and power.

Moreover, the local market settings differ in terms of “incompatible regimes of value between gift and commodity” (Çalışkan and Callon, 2009b, p. 385). The difference might be visible in the same product market yet in different localities. Therefore, Marxist theory remains significant in uncovering the differentiating

factors and interplays between the two regimes of value. Therefore, the extent to which the Marxist approach is feasible is argued to be able to formalize the market in relation to the complex and interwoven dynamics shaped by the processes of market making. In fact, the process of market making comprises actors from local, national, regional and global levels as well as constitutes and shapes their complex and diverse interests, behaviors and motivations.

Furthermore, rather than focusing solely on a class perspective and delimiting a social analysis to a class struggle, the dissertation aims to consider a wider standpoint on the nature of power struggles in complex processes of market making. The dissertation analyzes the spheres of individual, groups and institutions in a hybridized system of investigation that represents the arenas of power struggle between individuals and within groups and institutions. Therefore, beyond a limited class perspective (Polanyi, 1957), the hybrid character includes the diversity and multiplicity of actors, their interactions, encounters and controversies.

Çalışkan and Callon (2009, p. 8) describes diversity and multiplicity as follows:

From an empirical point of view, the most visible and well-known forces that set markets in motion are firms, trades unions, state services, banks, hedge funds, pension funds, individual consumers and consumer unions and NGOs. To be more complete we could also mention the public- and private-sector research centers that prepare new products and processes, the international monetary or financial institutions, the regulatory or standardization agencies (whether they concern hard technologies or social technologies such as accounting rules and practices), as well as experts, lawyers, economists, think-tanks and other spin doctors. There is no standard list. Part of the analysis would involve drawing up an inventory for each and every case.

Moreover, as the boundaries between the rural and urban spheres are blurred, the rural population combines different sources of income and develops complex forms

of reproduction (Schüren, 2003, p. 48). Therefore, these “different ways of making a living lead to more complex economic strategies and diversifications of peasantry” (Kearney, 1996, p. 147, Schüren, 2003). With these changes and diversification in mind, however, the dissertation identifies peasants as producers who are involved in economic activities in market places and who, and especially small producers, struggle with tough market conditions implementing various strategies without having any bargaining power in the decision-making process. The term *producer* also includes those who produce hazelnuts as either primary or secondary income.

The limitation of Marxist theory within the scope of the dissertation is demonstrated in that the production relations are important in understanding the class and power configuration on the ground. While the understanding of market in the Marxist tradition focuses on production and distribution, how the concrete market works is largely ignored. Moreover, the concepts of economic and social relations are reduced to the economic sphere. As such, the dialogue is assumed to be created among the sectors of the economy under the security of state support. However, the limitation of the dialogism to economic relations eliminates the diversity of society and excludes ordinary citizens. Therefore, the removal of the separation between production and exchange may provide a more comprehensive approach to the markets and dialogic relations.

The Emergence of the New Economic Sociology

Presuming the assumptions of the liberal and substantivist traditions, the new economic sociology assumes the economy to be universal, and provides an

understanding of society from a holistic perspective (Granovetter and Swedberg, 2001; Smelser and Swedberg, 2005; Fligstein, 2001; Dobbin, 2004). In the early 1980s, the new economic sociology emerged as an approach the contributors of which study production markets (White, 1981), securities markets (Wayne, 1984), labor markets (Granovetter, 1974) and financial networks (Mintz and Schwartz, 1985). This section argues the embeddedness approach and the weakness of this approach in probing the constitution of market. It explains how the new economic sociology identifies the informal institutions, networks and social devices as the mechanisms to maintain the market order and to eliminate uncertainty. The section concludes with the contributions and limitations of the new economic sociology.

The Concept of Embeddedness

The concept of embeddedness is the breaking point between economic sociology and new economic sociology. New economic sociology found the middle ground between formalism and substantivism with the concept of embeddedness (Çalışkan, 2010). According to the embeddedness approach of Polanyi (1957), all economies are embedded and enmeshed in social relations. Accordingly, economy does not form a separate institution with its own rules. Economy is determined by other institutions, such as kinship or religion, which organize production and distribution. The main principles of reciprocity, redistribution and exchange are embodied in the institutional context of family, central bureaucratic mechanism and the market, respectively (Polanyi, 1944, 1977).

Granovetter (1985, p. 490) emphasizes the ongoing networks of personal

relationships rather than focusing on the “atomistic” or “over-socialized” conception of economic action. He defines the term *embeddedness* in terms of the production of trust in transactions within networks. The concept of network is defined as “a regular set of contacts or similar social connections among individuals and groups” (Granovetter and Swedberg, 2001, p. 11).

Economic action is identified as “a form of social action” that is “socially situated” and thus “social construction” (Granovetter and Swedberg, 2001, p. 6; Aspers, 2010). Individuals are interiorized social norms and institutions, and are endowed with a “generalized morality” (Granovetter (1985, p. 490). Therefore, economic action emphasizes not only the inseparability of sociological perspective from economic action in terms of the pursuit of approval, status, sociability, and power, but also the struggle of power, interests and compromises. Providing a comprehensive definition on the embeddedness concept, Beckert (2009) identifies networks, institutions and cognitions and how they change emerge, reproduce and change in time. Similarly, Dobbin (2004) identifies it in relation to institutions, networks, power and cognition.

The Social Order of Markets, Uncertainty and Social Devices

Jean Beckert (2008) identifies three “structuring forces” of the social order of markets. These are “network structures that position organizations and individual actors in a structural space”, “regulative institutional rules that either support or discourage the behavior of individuals”, and “cognitive frames that provide the mental organization of the social environment” (p. 9). Accordingly, Beckert (2009)

points out the coordination problems of the market to ensure its social order. These problems are value, competition and cooperation. For Beckert (2009), these problems can be resolved by “stable reciprocal expectations” (p. 259) to ensure the social order of market. As such, the social devices constitute a common ground for reciprocal expectations for interactions. At that point, social devices are summed to reduce uncertainty.

As such, the new economic sociology puts the emphasis on informal rules in relation to networks that are embedded in the surrounding market (Streeck, 2005; Fligstein, 2001; Fourcade, 2007; Smith, 1990). The networks are created to overcome the uncertainty that is related to bounded rationality, asymmetrical information and insecurity (Granovetter, 1985; White, 1981; Burt, 1992; McLoughlin, 2002; Uzzi, 1997).⁸ As Plattner (1989, p. 211) writes, “The riskier the economic environment, the more traders need additional information about a partner over and above the specific facts of the proposed deal.” The acquisition of valuable information necessitates a sense of trust in order to minimize the risk in exchange. When the exchange environment is not highly institutionalized, or when information is monopolized by certain groups, trust is required to be involved in personalized relationships that enable exchanges at lower risk. The trust takes the form of the surrendering of the weak to the more powerful (i.e., the largest exporter) for protection.

Therefore, networks are created when the actors perceive risk and seek economic safety and security. Trust is identified as “shared meaning” (i.e., becoming the part of the largest network) (Cantor et al., 1992, p. 9). Similarly, “congealed networks,” through which interactions generate trust, are taken for granted by

⁸ For a review on the uncertainty concept in the new economic sociology, Beckert (2008).

network members (Granovetter, 1992, 1985). Economic action involves “the choice between alternative partners to maximize the unwritten trust element of contracts” (Narotzky, 2007, p. 60). As such, uncertain conditions create trust networks in order to ensure the secure market environment (Cook et al., 2002).

Contributions and Limitations

Two main contributions of the new economic sociology may be identified. First, the new economic sociology argued the “sociological reasoning on the economy” from the perspective of culture, power, institutions, social structures, and cognitive processes (Beckert, 1996, p. 805, 831). For Beckert (1996), the sociological theory is well-suited for the analysis of economic processes. Second, the social devices including traditions, habits and routines; norms and institutions; social networks, organizational structures, path-dependency; and power, are not identified as neutral (Beckert, 1996). Beckert (2008, p. 10) proposes that these devices are subject to change by the actors who are in an ongoing struggle to change “the market field.” Similarly, Granovetter and McGuire (1998) argue that it requires the endless everyday work of investment in relations and networks to make the market work. Therefore, the everyday struggles have become a research unit for the study of markets.

Providing a structural perspective, the new economic sociology analyzes market structures, its dynamics and changes. However, the new economic sociology has four main limitations. First, the analysis is mainly based on the dominance of sociological analysis in studying markets. However, the new economic sociology

analysis of the sole social aspects of the market construction ignores its socio-technical aspects (Çalışkan and Callon, 2009a). As the economic anthropology is originated along with the concepts of gift exchange, reciprocity, the social life of material things, and the social construction of markets, which were essentially introduced by Marcel Mauss and Bronislaw Malinowski (Malinowski, 1922; Sahlins, 1965), the sole analysis of the social aspects of the market becomes limited. Considering the role of material things, it became increasingly apparent in the anthropology literature that economics, particularly when applied to local markets, is based on the significance of socio-technical construction.⁹

Second, the embeddedness approach is delimited in analyzing the implications of the institutional struggles that create uncertainties. The new economic sociology takes the uncertain conditions for granted and considers it as a factor of network creation. In fact, it is significant to analyze the local and global mechanisms and factors that create networks and informal relations, how they are maintained, how uncertainty shapes the form of informality, what the role of uncertainty is in the creation of informal networks, and how networks are maintained in and by uncertainty. The practices of the everyday market are characterized in relation to market maintenance. The informal networks are the tools of market maintenance.

This insight reveals further limitations. Third, the network approach is criticized due to its limited insight into the change in the interaction between formal and informal institutions. The new economic sociology approach is criticized as being “too deterministic” and also “too static” due to the lack of a focus on contingencies and changes in economic action (Beckert, 2008, p. 4). In fact, to what

⁹ In Turkey, the studies of Koray Çalışkan (2003, 2005) and Ebru Kayaalp (2006) provide the perspective of economic anthropology.

extent the network analysis provides an understanding of change in trust patterns among the market actors is crucial in relation to individuals rather than firms and networks and their relationship with the wider structures. As Fligstein (2001) proposes, network analysis does not consider the role of institutions and cognition in its explanations of economic results.

Fourth, Beckert (1996) defines social devices to overcome the limitations of decisions under uncertainty. Social devices are identified as tradition, habit, routines; norms and institutions; social networks, organizational structures; and power. As such, the social order is dependent on the reduction of uncertainty (p. 826).

Accordingly, it is argued that the social devices create reciprocal expectations for interaction and “limit the choice set of actors” to increase predictability (Beckert, 1996, p. 827). However, for all the recognition of social devices, the new economic sociology disregards the constitutive dynamics of uncertainty. A discussion of what social devices envisage a form of market in which they create uncertainty is missing.

Hazelnut Specific Market Studies

The previous literature on hazelnuts refers to the institutional and economic aspects of the pricing, production and exchange from an analysis focusing on enterprises (Bülbül, 1979; Cinemre and Ceyhan, 1998; Çelebi, 2006; Kılıç, 1997; Hisarkaya, 1990). The literature on hazelnuts from the classical economic perspective includes studies on econometric analysis in production costs (Cinemre and Kılıç, 1998), in excess supply (Yavuz et al., 2005), in productivity and efficiency (Bozoğlu, 2001b; Kasnakoglu, 1976), in supply and price elasticity (Kılıç et al., 2008), in the

international market (Marongiu, 2005) and in policies (Yavuz et al., 2005).

Furthermore, these studies also focus on comparative economic analysis in light of the possible EU membership (Genç, 1992; Atasavun, 1989; Bozoğlu, 2001a) as well as in input cost and production techniques (Gürler et al., 2004; İlkyaz, 1986; Kaya, 1986; Kılıç and Demir, 2004; Kiral et al., 1999; Alkan, 2006), also export prices and volumes substitute product prices (Yalçın, 1994; Ceyhan, et al., 1996).

In light of the institutionalist account, the current literature on hazelnuts examines the impacts of organic agriculture of hazelnuts (Demirci et al., 2002; Demiryürek, 2000; Bülbül and Tanrıvermiş, 1999), analyzes the agricultural policies of the government (Bozoğlu, 2005a, 2005b; Dono and Franco, 2001; Sarımeşeli and Aydoğmus, 2000) and support policies (Bozoğlu, 1999; Ceyhan et al., 1996; Hacıbrahimoğlu, 1992; Yılmaz, 1990; Bozoğlu and Kızılaslan, 1999; Demirci, 1999; DPT, 2001) in relation to international institutions, mainly the alternative product project (Kılıç, 2002; Kılıç and Özyazıcı, 2003; Kılıç, et al., 2005; Kılıç et al., 2006). These studies also compare international production (Önal and Kılıç, 1995) in the world. More importantly, some of them provide socio-economic aspects (Genç, 1993; Berber, 1996; Kılıç and Özyazıcı, 2003) in relation to the technical production of hazelnuts (Alpaslan, 1988) and producers' behavior (Uzunöz et al., 2006) in terms of an alternative product project (Demiryürek and Bozoğlu, 2002).

Moreover, the hazelnut specific market studies also discussed the structural changes in the world hazelnut market in relation to the impacts of the production conditions in the hazelnut producing countries. In Italy, the policy and prices changes in the market have been the subject of study in terms of the Mid-Term Review of Common Agricultural Policy in the EU (Dono et al., 1998; Dono and Fransco, 2001;

Dono and Papaleo, 2005). The studies analyze the hazelnut market policies with a competition analysis, policy environment and supply-demand balances in Chile (Ellena et al., 2012) and in Australia (Baldwin and Guisard, 2012).

In terms of hazelnut-specific market studies, the analyses largely have considered the macro-level analysis from a larger perspective of economics, agricultural economics and institutionalist accounts as well as the micro-level analysis that considers firms and households. The agricultural markets have been studied as well as the problems and challenges of the market with the tools of economic models, policy analysis and institutional structure. The approach in these studies has taken the constitution principle of economics, which is resources allocation under scarcity. As such, the efficiency analysis was conducted with the application of econometrics to economics. Again, the efficiency and effectiveness were discussed in relation to the institutional structure and changes, in general, and policy analysis, in particular. Moreover, the sociological analysis was applied within the sociology of economics in terms of the impacts of the changes in the production conditions on the social lives of the producers.

However, these studies ignore the process of the hazelnut market making in relation to the interaction between the market mechanisms. Moreover, an anthropological perspective on the study of the hazelnut market and economizing uncertainty fills the gap in this area. The next section explains how the dissertation analyzes the processes of market making and how the research contributes to the literature that was reviewed so far.

New Directions of Research in Market Studies

The role of economics in the constitution of the economy has been studied in the economization literature to challenge the abstract models of the markets and to uncover the concrete market practices (Muniesa et al. 2007; Callon et al., 2001; Callon and Muniesa, 2005; Mackenzie, Muniesa and Siu, 2007; MacKenzie et al., 2007).

How to Study Markets?

The economization process “constitutes the behaviors, organizations, institutions and, more generally, the objects in a particular society which are tentatively and often controversially qualified, by scholars and/or lay people, as ‘economic’” (Çalışkan and Callon, 2009a, p. 370). The process is defined as “the assembly and qualification of actions, devices and analytical/practical descriptions as ‘economic’ by social scientists and market actors” (p. 369). The process or market making reveals the dynamic, diverse and hybrid nature of production, exchange, calculation, and the formal and informal, and pricing relations. The dissertation analyzes the process of hazelnut market making in its environment.

Therefore, the market studies require the examination of the process of market making that includes institutions (Fligstein and Dauter, 2007), power relations (Çalışkan, 2007a; 2007b), and cognitive (Callon, 1998, Miller, 2002) and discursive and bifurcation processes (Muniesa et al., 2007). These definitions are revisited within the concept of uncertainty through which the market is constituted and

maintained. The following market definition of Çalışkan and Callon (2009b, p. 3) is adopted in the dissertation:

... Markets as socio-technical arrangements or assemblages (agencements) that have three characteristics:

1. Markets organize the conception, production and circulation of goods, as well as the voluntary transfer of some sorts of property rights attached to them. These transfers involve a monetary compensation that seals the goods' attachment to their new owners.
2. A market is an arrangement of heterogeneous constituents that deploys the following: rules and conventions, technical devices, metrological systems, logistical infrastructures, texts, discourses and narratives (e.g., on the pros and cons of competition), technical and scientific knowledge (including social scientific methods), as well as the competencies and skills embodied in living beings.
3. Markets delimit and construct a space of confrontation and power struggles. Multiple contradictory definitions and valuations of goods as well as agents oppose one another in markets until the terms of the transaction are peacefully determined by pricing mechanisms.

In light of this definition, the study of marketization is defined “as the entirety of efforts aimed at describing, analyzing and making intelligible the shape, constitution and dynamics of a market socio-technical arrangement as outlined above” (Çalışkan and Callon, 2009b, p. 3) With this in mind, the process of marketization requires the

study of market making with the constituting and interacting dynamics of the market. Moreover, it is also important to understand the implications of market making, which is uncertainty.

Uncertainty and Technical Democracy

Callon et al. (2009) identify uncertainty as unknowns, the lack of precise knowledge, ignorance and enigmatic interactions. With this argument, they propose three conditions that identify uncertainty: the lack of identification of possible options, the lack of presuppositions on each option, and the infeasibility of the assessment of the significant interactions (p. 17). However, these conditions indicate where there is no possibility of rational thinking due to the lack of known and probabilities.

Productive uncertainty is identified as being able to enrich the collaboration between the market agents through the socio-technical controversies that take place in public spaces (Callon et al., 2009). Therefore, hybrid forums are identified as an open public space in which “the perceptions that different groups have of each other revealed, instead of confronting each other and debating through interposed spokespersons and official representatives” (Callon et al., 2009, p. 34). In these forums, “the controversies take place and in which the direction given to research and the modes of application of its results are discussed, uncertainties predominate, and everyone contributes information and knowledge that enrich the discussion” (p. 9).

This is called *technical democracy*, in which the asymmetry between the representative and those they represent is eliminated (Callon et al., 2009, p. 9).

Technical democracy requires the involvement of ordinary citizens, non-specialists, and facilitates the double exploration of identities. Therefore, according to Callon et al. (2009), delegative democracy is enriched, expanded, extended and improved. For them, “ordinary citizens have learned to mistrust information provided by the institutions ... the isolation and exclusion of the ordinary citizens reflect into their suspicious behavior” (p. 14).

The Economization of Uncertainty

The dissertation follows a research program, as initiated by Çalışkan and Callon (2009b), that includes the discussion of things in the market (i.e., material things such as hazelnuts), agencies (i.e., individuals, formal and informal institutions and organization/firms), encounters (i.e., interactions, socio-technical controversies and exchange), prices (i.e., local and global interaction) and market maintenance (i.e., informal networks and rhetorical devices). This section argues this research program called *economization* to discuss “the contribution of economics to the constitution of the economy” (Çalışkan and Callon 2009b, p. 370).

Within the process of market making, the dissertation discusses how the market is constituted and maintained by uncertainties. The dissertation induces the market making as a unit of analysis in order to observe how uncertainty is produced and how uncertainty sustains the market. The analysis of the market making reveals the interaction between the market agents. The discussion, also, is related to the implications of this interaction and thus uncertainty. This dissertation analyzes the interaction between the market agents as a whole and how it implies uncertainties.

The processes of market making are identified as marketization, which constitutes a model to study economization (Çalışkan and Callon, 2009b). Moreover, the research program also includes the politics of market making that is conceptualized as the contested relations, interplays and interaction between the market groups.¹⁰

The Market as Uncertainties

The literature that considers markets “collective devices” refers to “the effectiveness of markets” and provides tools to ease complex calculations and to “produce practical solutions to problems that could not otherwise be solved by purely theoretical reflection” (Muniesa et al., 2007; Callon et al., 2001). As opposed to the rationality approach of calculative devices, one might ask what happens if these devices cannot be calculated?

Renn et al., (2000) focus on the limitations of mathematical concepts in explaining how people think and act in situations where there is an element of uncertainty (Boholm, 2003). They argue that individuals do not always make rational decisions (Boholm, 2003; Beckert, 2009). On the contrary, Wan (2001, p. 228), who analyzes the “Gari”¹¹ economy of Ibadan, identifies uncertainty as “the fluctuation of the retail price in urban markets” and explains how “gari traders rely on a number of practices” such as “measurement that enable traders to manipulate their margins of profitability ... to mitigate risk and enable some control over uncertainty.”

¹⁰ Regarding the politics of marketization, Blok (2011) studied the transnational non-governmental organization practices of contestation as a contribution with a political aspect into the performativity program proposed by Michel Callon.

¹¹ The article is on the ‘gari’ economy that demonstrates the expansion of the ‘gari’ (processed cassava) supply system in southwestern Nigeria. Wan (2001) proposed that secrecy, competition and success are the key features of the local market in Ibadan.

As such, the line between social (i.e., manipulation) and technical (i.e., measurement) controversies is blurred. Uncertainty as a market device initiates a process of market making that includes discursive and material tools as a part of socio-technical controversies. The dissertation explores the controversies among the market groups that struggle to maintain the market and its so-called equilibrium, by uncovering the implications of the process of its maintenance. The dissertation analyzes the role and dynamics of the socio-technical controversies in the attempts of market groups to achieve so-called market equilibrium. In that sense, the equilibrium becomes the space in which the market groups agree on the prices through negotiations and controversies. The dissertation analyzes the price and market-making processes through socio-technical controversies. It also argues that the controversies with the lack of collaboration among the market agents create struggles, instability, the production of rhetorical devices and thus destructive uncertainties. How does this constitution imply uncertainties through controversies?

The controversies remain alive as market groups keep their positions to construct uncertainties. The dissertation examines how the market encounters and controversies create uncertainty and how uncertainty is constructed by the market groups. These attempts and controversies through uncertainties create the market and vice versa.

According to Çalışkan and Callon (2009b),

Markets involve a series of multiple encounters and overlapping processes of calculations. Contingencies certainly play a part, as do the initiatives taken by agencies and the unpredictable movements of goods which overflow and follow unexpected trajectories ... Like goods and agencies, they are also framed and formatted by a series of devices (p. 14).

Therefore, the dissertation does not provide a dichotomy between economy and society and thus does not consider embeddedness as the constitutive of market making. With this in mind, the lines between supply and demand, production and exchange, economy and society are blurred. Throughout the dissertation, I conceptualized embeddedness as constitutive encounters between market and society, between supply and demand, and within institutions. Institutional struggles emerge as everyday controversies that make and maintain the markets.

Formal Institutions and Rhetorical Devices

Formal institutions play significant roles in the creation of categories (i.e., producers versus exporters), symbols (i.e., forward and spot prices), emotions (i.e., hostility, hatred between formal institutions and organizations), and forecasting (i.e., threat perception, suspicion) (adopted from Hollander and Gordon, 2006). Uncertainties are constituted, shaped and maintained through rhetorical devices created by the market groups. Uncertainties emerge when the market agents embrace and take the given rhetoric for granted. Rhetorical devices are identified as devices “that consist of reinforcing people’s interests in line with being submitted to some specific directives” (Cooren, 2000, p. 184). Rhetorical devices are significant in the market making to understand how facts are constructed in the specific interests of formal institutions and organizations and how this social construction creates uncertainties.

Rhetorical devices are not about the normative and disciplining strategy of the powerful; instead, they are about manipulation, speculation, information creation, misinformation (Zinn and Taylor-Gooby, 2006), calculated delays (Moore, 2009),

rumors, narratives, and categorizations (Fiss and Kennedy, 2007). As such, Habermas also states that political autonomy distorts communication where knowledge entails rationally justified belief (Habermas, 2003, quoted in Ingram, 2010, p. 95). For Gadamer (2008), truth emerges through a complex process of understanding texts in the contexts of their history, their language and their audiences to produce new and fresh meanings. Holmes (2009) analyzed how “words are employed not merely for expressing interpretative accounts or commentaries: they create the economy itself as a communicative field and as an empirical fact” (p. 381).

Rhetorical devices constitute technical aspects of the politics of market making. The technical aspects of politics are identified as “devices such as press conferences, parliamentary debates, public demonstrations, public opinion polls, political analyses, electoral registers and so on ...” (Barry, 2002, p. 269). However, the rhetorical devices, strategies and unknowns cannot be calculated by the market actors. In fact, rather than the calculating aspect of the devices, the dissertation analyzes the constitution aspects of them by probing the mechanisms that create these devices. At that point, those who are not involved in the creation of the rhetorical devices engage considerably with constructed uncertainties. Also, the analysis includes the unsteady path of resistance and collaboration on the part of the market actors.

Therefore, although formal institutions are perceived as a reference to overcome uncertainty, their attempts to calculate, control, reduce or remove uncertainty actually lead to the generation of further, or the accentuation of existing, uncertainty on the ground. Callon et al. (2009) also refer to “the limitations of the political institutions” and the need to “be enriched, expanded, extended and

improved to make the democracies more able to absorb the controversies” (Callon et al., 2009, p. 9).

Pierson (2000) also examines the limitations of “rational designs of institutions”. Providing a functionalist critique against the institutional design, he questions the actions of the institutional designers in “acting instrumentally” (p. 478). In the dissertation, the inefficiency of the institutions is related to two factors. The first one is the structural determination and procedures that are applied within the formal institutions (Callon et al. 2009). The second one is that the local market is constituted by uncertainty through power relations that are somewhat reluctant to create a system that overcomes uncertainty. This is a “kind of power, which emphasizes control over contingencies rather than the control over resources” (Marris, 1996, p. 1).

Formal versus Informal Institutions

The formal and informal institutions encounter each other in different socio-technical controversies in the process of market making. The dissertation identifies formal and informal institutions in the market making and their interrelations with each other as well as analyzes the implications of these interactions. Informal networks also become tools to maintain the market through uncertainties. The analysis of the everyday making of the market shows how market groups (i.e., exporters) sustain their power through networks. The dissertation focuses on how these mechanisms are maintained, how they change over time and how the change transforms the interaction between informal institutions and formal ones.

In analyzing the change, the dissertation reveals how the network leader (i.e., leading exporter) creates trust relations in response to the changes in these relations. Therefore, it is significant to investigate the nature of everyday network relations to understand the information exchange. The dissertation provides an understanding of how trust relations are built by the market groups and how these relations change in relation to the market crisis as well as how the change leads to the new configuration of the exchange (i.e., from merchant-producer relations to bank-producer relations).

The analysis of the process of market making provides insight into these arguments. The dissertation does not consider informal institutions as the informal rules and constraints of social exchange that are structured to minimize the transaction cost. Furthermore, the concept of informal institution does not signify culture, tradition (Dia, 1996) customs, religion or caste (Casson et al., 2010), implicit norms and customs (Wang, 2000), patron-client relations (Bratton, 2007), or means of political participation such as corruption and civil disobedience (Lauth, 2000). The dissertation analyzes informal institutions in relation to informal networks (Wang, 2000),¹² the unregulated informal sector (Harris and Sinha, 2007), the lack of written rules (Hyden, 2006; Helmke and Levitsky, 2003), unwritten and non-contractual communication (Hyden, 2006; Wang, 2000; Borocz, 2000), and charisma and trust (Hyden, 2006). According to Hyden (2006, p. 11), informal institutions are based on shared expectations, closed, confidential and ambiguous engagement.

The dissertation examines the competitive interaction between formal and informal institutions, and the concepts of trust and change in the interaction between formal and informal institutions, and how this interaction changes in response to

¹² Informal networks in China such as family, kinship, and clans were analyzed as well as social organizations and important economic organizations (Wang, 2000, p. 533).

local, regional and global changes. Competitive spheres occur between the informal institutions/networks (i.e., traditional market setting where informal give-and-take relations prevail, unwritten contracts) and formal institutions (i.e., projects of commodity exchange and license warehouses). The competitive character of this interaction also indicates that the complex process of market making creates the market at the local level in a way that is not envisaged by liberalism.

Politics of Market Making: *The Concept of Dialogism*

The dissertation examines the ways and the mechanisms that uncertainty influences the local market through uncovering the specific dynamics of socio-technical controversies. The dissertation analyzes the dynamics of change in resistance mechanisms, how resistance mechanisms are restrained by delegative democracy and its procedures, and how these mechanisms work from countermovement to convergence. To understand these dynamics, the dissertation explores the concepts of dialogism and weak degrees of dialogism.

Dialogism is studied not only in terms of the communication action (Habermas, 1996), but also in terms of bias (Gadamer, 2008), rhetoric (Bormann, 2001) and everyday communicating (Hyde and Smith, 1979). Buber (1970) argues that it does not develop apart from its link with an acknowledge other. As such, dialogism is related to learning (Freire, 2000) and equality among the persons involved (Anderson et al., 2004). In that sense, communication is a fluctuating, multi-vocal process in which uncertainty infuses encounters between people and what they mean and become (Anderson et al., 2004). According to Baxter (2004), dialogue is an endless

process in which identities emerge (Taylor, 2004).

Two scholars, Jürgen Habermas and Michel Callon, are analyzed on the concept of dialogism. Both propose the concept to overcome inequality, asymmetry and injustice. However, they differ in terms of their understanding of the market and of the interaction between its market agents.

Habermas (1976) criticizes liberal democracy and the welfare state system in two ways. First, liberal democracy becomes closer to the power mechanism and it loses its legitimate role. Second, the welfare state system extends the legitimation role of the state while individual autonomy decreases. For Habermas (1976), both situations lead to the limitation of self-determination. He criticizes the de-politicized and restricted (to the system of private property and consumption) public sphere that makes individuals passive citizens who become the objects of politics.

For Habermas (1996), policy making is not the autonomous space of normative regulations; instead, it needs to include the determination of the common good of society. He argues that the distance between rational individual autonomy and consensus is based on the use of knowledge based on negotiation and consensus. Habermas (1996) proposes deliberative democracy with the rule of law and constitutional state within the rational communication action. Rawls (1993) also refers to public reason to include citizens in policy making. Both Habermas and Rawls propose the direct engagement of citizens in political decision making (McCarthy, 1994).

As such, policy making is a process of communicative action in which each citizen affected by the norm should be included. The communication power contains the informal institutions (including family, unions, religion) that are involved in the

social life re-produced by rational communication. He proposes that the public sphere should include citizens, groups, movements and organizations to create the discussion, negotiation and contradiction that are the tools of deliberative democracy (Habermas, 2003 quoted in Benhabib, 1996). In this kind of dialogism, the individuals disregard their individual self-interests and direct themselves to common good.

However, Callon et al., (2009) challenge Habermas, saying that, in hybrid forums, the process of dialogue does not require individuals to detach from their network of sociability, values, identities, interests and emotions. They (2009, p. 238) identify the market as “contested, illegitimate and sources of inequality and injustice” in the absence of hybrid forums. As such, the market becomes the spaces of negotiations and controversies between market groups that constantly interact with each other. Callon et al. (2009) identify hybrid forums where groups come together to discuss technical options as a collective experimentation and learning experience.

The process of dialogue never ends and reveals uncertainties; this is a kind of productive uncertainty that allows new identities and minorities. However, although Anderson et al. (2004) also identify dialogic communication as productive and constitutive, it is assumed that it does not idealize or seek common ground. This is the process of dialogue through listening and becoming open to the call of the other. On the contrary, according to Callon et al. (2009, p. 10), the creation and implementation of collective learning to produce “new knowledge and new social configurations, ends up fabricating a close wave of micro-decisions, each of which is subject to discussion and linked to those that precede it as well as those that follow”.

Therefore, the dissertation analyzes the socio-technical controversies within the

process or market making in relation to the degrees of dialogism. The degrees of dialogism are adopted from (Callon et al., 2009) as follows:

- The intensity for composition of a collective between specialist and non-specialist as well as between representatives and those that are represented,
- The degree of diversity of groups involved,
- The degree of quality of collaborations and discussions,
- The degree of the interdependence between the groups,
- The degree of clarity in implementation,
- The degrees of equality and transparency

The analysis on the process or market making reveals the drawbacks of delegative democracy, and thus creates an understanding of how ordinary individuals are excluded in policy and price-making processes. The analysis of the degrees of dialogism reveals how the politics of uncertainty contribute to the constitution of the market through perception, expectation and manipulation. The weak procedures of delegative democracy create contentious socio-technical controversies between those who are involved in the controversies and those who are not. Those who are involved signify the decision-makers, formal institutions, organizations, firms, and those who have the ability to create, control and thus interfere with uncertainty. Those who are not involved signify the ordinary citizens (i.e. producers).

The dissertation reveals that although there is a close interaction between individuals and informal ties (i.e., debt/borrowing relations, merchant-producer

relations, informal contracts), the individuals are isolated from the formal institutions. Callon et al. (2009) refer to this as the asymmetry between specialist and non-specialist as well as between representatives and those they represent. These categories possess specific forms of knowledge; however, specialists, formal institutions, organizations, experts, politicians have the capacity for diagnosis, the interpretation of facts, and the range of solutions (p. 34). The dissertation reveals how the factors of dialogism depend on the conditional thinking of the market groups. As such, the dissertation explores one further condition of the hybrid forums, the willingness of the market agents, who produce uncertainty to “liberalize and democratize the markets.” This requires the favor of the market groups to enable the expression of every voice and to facilitate the expression of views (Callon et al., 2009, p. 238).

In light of this conceptualization and research program, the dissertation analyzes how the dynamics of socio-technical controversies change over time. What are the limitations of the shift from countermovement to convergence in relation to the degrees of dialogism? How does constructed uncertainty make dialogism unviable? The answers to these questions would provide the possibility to consider alternatives to the new forms of market design. The dissertation reveals that the asymmetry between specialist and non-specialist as well as between representatives and those they represent creates destructive uncertainty.

Uncertainty versus Risk

The literature on uncertainty relates the concept to risk. From classical economics to institutionalism and to anthropological accounts, uncertainties are analyzed from the perspective of risk and rational risk perception. In fact, the dissertation analyzes risk as constructed uncertainty in a way that the only risk is objective risk, which is created naturally and uncertainty, which is the social creation of objective risk. The constructed uncertainty is not about the risk, but the configuration of power to create uncertainties in the making of the market.

There are extensive sociological studies on “risk-societies” in terms of overcoming and managing uncertainty and survival strategies due to the non-probabilistic and incalculable future (Beck, 1992; Binswanger, 1980) such as safety-first strategies (Anderson, 1979; Lipton, 1968), sharecropping (Hayami and Otsuka, 1993; Wells, 1996), creating ecological niches (Orlove and Godoy, 1986), planting different varieties of crop (Brush, 1982; Scott, 1976), with regard to environmental and sustainability policy domains (Dovers et al., 2008; Carter, 1997), or concerned with uncertainty as control (Steffen et al., 2004). These approaches to risk include the analysis of modern institutions to organize and control the risk rather to prevent, contain and eliminate it (Callon et al., 2009).

There is also a long-standing anthropological tradition of studies concerned with how individuals deal with the uncertainties of life in relation to misfortune (Whyte and Whyte, 1997; Turner, 1968). There also are studies of risk in relation to culture and uncertainty (Douglas, 1994). Accordingly, risk perception, its control and management are culturally constructed. Therefore, the studies focused on “what the

world consists of and how it works” (Boholm, 2003, p. 161; Purcell et al., 2000) to understand the nature of the cultural notions.

In relation to risk perception, Douglas (1994) argues that cultural notions intuitively indicate the perception of danger and harm as well as why things behave as they do (Boholm, 2003). In that sense, cultural notions provide explanatory models to understand the culturally created perceptions on good or right as well as bad or evil (Douglas, 1994; Boholm, 2003). As regards the assumptions on risk and culture, several studies link risk perception with culture (Adams, 1995; Douglas, 1994; Wildavsky and Dake, 1990; Dake, 1991, 1992; Mairal and Amores, 1998; Rappaport, 1996). Moreover, challenging “simplistic” ideas about culture and risk as well as criticizing mathematical definitions of risk, Boholm (2003) proposes a broader perspective toward risk in relation to cognitive theory. He defines “risk as a relational order through which connections between people, things and outcomes are constituted” (Boholm, 2003, p. 175; Boholm and Corvellec, 2011).

Anthropological perspectives challenge the economic assumptions by focusing on how culture and social relations frame decision and provision processes (Mayer and Glave, 1999; Appadurai, 1991; Gladwin, 1980). Similarly, studies focusing on political implications or risk and safety illustrate “how concerns about risks to human health and the environment can turn into intensely contested political affairs” (Boholm, 2003, p. 160). Contrary to the discussions on uncertainty as risk, uncertainty is seen as the tool to improve creativity (Bernstein, 1996).

Anthropologists and sociologists similarly describe socially embedded strategies that allow small producers to confront uncertain aspects, such as gift exchanges, which are regarded as moral obligation rather than insurance against risk

(Ortiz, 1973). Regarding financial markets, Zaloom (2006, p. 93) identifies risk as a “play with the uncertainties of the future” and as a “constitutive element of contemporary power and economic practice,” and thus associates the concept of uncertainty with instability and technological influences (Zaloom, 2003).

In fact, uncertainty in market making and its impacts on the market agents on the ground have remained largely unexplored and under-theorized. Uncertainty in local market making is more than a pure conception of physical harm or economic loss in a given culture. Despite the fact that cultural theory aims to explain risk as a “phenomenon shaped by social and cultural processes”, the dissertation challenges this perspective by focusing on “the thoughts, intentions and strategies of individuals” (Boholm, 2003, p. 164) to understand not just their sole motivation to minimize their uncertainties, but also probing the constituting dynamics of uncertainty perception.

With these previous studies in mind, this dissertation takes a broader perspective and analyzes uncertainty as a relational outcome that is constituted by goods, agencies and encounters (Çalışkan and Callon, 2009b). Rather than delimiting the term “uncertainty” to the taken-for-granted motivation of risk as a calculating, rationalizing and economizing nature, the dissertation identifies it in a broader context including societal implications and motives. With this in mind, the dissertation questions the motives of market agents in creating uncertainty, rather than the sole risk perception.

Therefore, while insisting on the importance of uncertainty to any social conceptualization of market making, this dissertation expands the framework within which it is solely understood in terms of risk and aversion capacities. First, there is a

need to look at how uncertainty is constituted and maintained in the market, and, how it shapes and sustains the market. Second, it needs to be examined how the market agents produce, encounter, experience and deal with uncertainty. Finally, rather than viewing uncertainty as a general feature of economies, the dissertation offers an argument in favor of refashioning uncertainty as a peculiar matter of market conditions and both natural and artificial dynamics such as environment, the hazelnut tree itself, as well as politics.

Research Questions and the Field Work

At the conclusion of the research program, the dissertation intended to achieve the following objectives:

- To improve the existing concepts and theorizations of economics, politics and sociology;
- To develop an integrated explanation of the impacts of the market making process on the local markets;
- To map uncertainties taking place during the process of market making;
- To fill the lacuna within the literature on liberalization/globalization and the definition of market and thus contribute both to an in-depth understanding of the issues on agricultural transformation, and to find out the space to create new forms of market design;
- To outline a research agenda the findings and insights of which may also be applied to other local cases with regard to observed shifts in market formation.

The dissertation presents the politics of agricultural transformation and uncertainty in hazelnut market making. The research was carried out in four countries and twelve cities (Kocaeli, Düzce, Sakarya, Samsun, Ordu, Giresun, Trabzon, Ankara, Istanbul, Paris, Hamburg and Batum), as well as 63 of their villages.¹³ The research was conducted with a randomly selected sample of participants with their approval. Both producers and institutions were eager to be interviewed and help such an academic study; hence, revealing the purpose of the research proved convenient. Regarding the identity of the some of the participants, since they did not want to be revealing their names, their anonymity was maintained.

Why Hazelnuts?

Turkey's hazelnut market representing almost 75 percent of all of the hazelnuts in the world, carries a global market character that allows the observation of both local and global market forces. Providing a different character from other agricultural products, hazelnuts are nonperishable and can be used as industrial ingredients. The largest hazelnut importer Ferrero describes the history of Nutella spread as follows (Nutellausa, 2011):

Nutella spread, in its earliest form, was created in the 1940s by Mr. Pietro Ferrero, a pastry maker and founder of the Ferrero Company. At the time, there was very little chocolate because cocoa was in short supply due to World War II rationing ... So Mr. Ferrero used hazelnuts, which are plentiful in the Piedmont region of Italy (northwest), to extend the chocolate supply.

¹³ Some of the names of the villages, their neighboring towns and informants are pseudonym.

Besides other products, the Nutella brand positioned itself as a hazelnut spread, and was advertised as a breakfast food. The tradition of Nutella is described follows (Nutellausa, 2011):

European families and visitors have enjoyed Nutella hazelnut spread as a breakfast staple on bread and toast for more than 40 years. The Ferrero Company wanted to introduce this traditional Italian breakfast item to the U.S. market to share the enjoyment of such a unique, convenient and tasty product.

Such an exchange of commodity and social values is constructed through politics among the diverse interests of actors due to the disproportional distribution of exchange. The link between the value and exchange in the social life of Nutella is constituted through politics. The dissertation analyzes the politics of market making (i.e., production, calculation, exchange, valuation/pricing, policy making) as a process that constitutes the relations of privilege (i.e., global actor) and as a constant tension between the existing frameworks of price, bargaining, estimating and as a tendency of commodities to breach these frameworks (Appadurai, 1986, p. 57).

Despite competing products such as almonds and pistachios, the hazelnut is an indispensable ingredient for confectionary companies. Hazelnuts also are used widely in the chocolate industry. According to the statistics dated back to the 1930s, hazelnut consumption has been increasing. The export figures of Turkey prove this rapid increase over the years (Fig. 1):

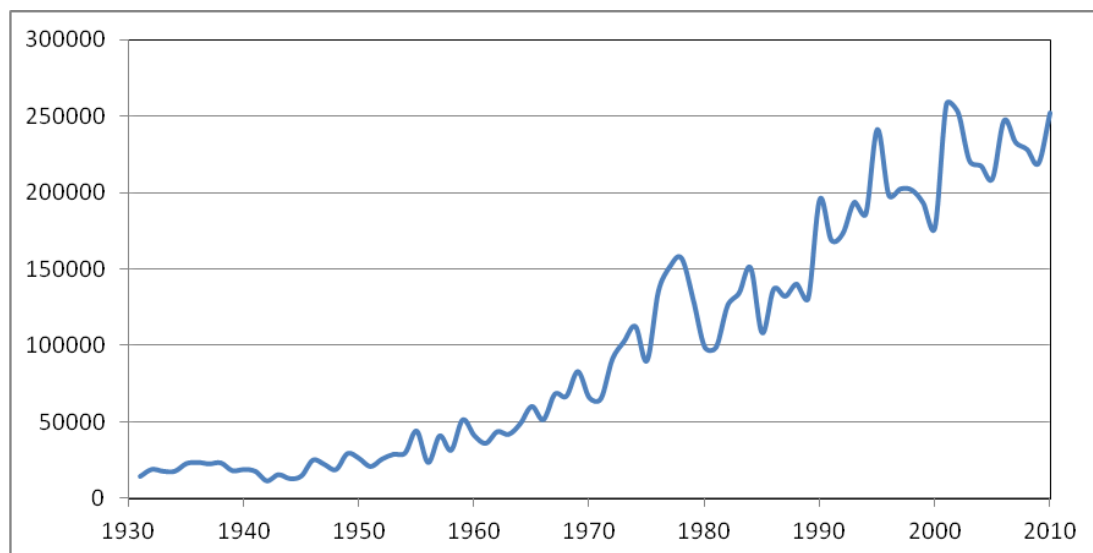


Fig. 1: Hazelnut Exports in Turkey (1930-2010) (Mt)

Source: KİB, 2011. <http://www.kib.org.tr/media/2010.pdf>.

Especially for the last two decades, in light of the rapid liberalization of local markets, the problems and challenges the agricultural sector has confronted abound. The hazelnut market provides a location to provide a clear picture of agricultural transformation and changes through socio-technical controversies, from the perspective of an emerging and transforming economy. The hazelnut market in Turkey as a unit of analysis has been undergoing a significant transformation in the process of liberalization that includes contested processes of uncertainty. In 2000, with the Agricultural Reform Implementation Project (ARIP) initiated by the World Bank in Turkey, the hazelnut market entered a liberalization process featuring liberal policies; hence, a change occurred in the state-based environment in order to create global product markets discrete from local markets. The local hazelnut market provides an ideal illustration of politics that can be observed only through local relations. The dissertation analyzes the developments of the hazelnut market

especially since 2000.

The restructuring and the diversity in the market have created an area of divergences and challenges in the process of liberalization. The dissertation conceptualizes the structural reforms initiated by the EU and international organizations including the World Bank, the WTO and the IMF within the process of liberalization. As such, the dissertation argues that this process includes the controversies and encounters that include conflicts, contradictions, resistance and bargaining in the local market. The liberalization has led to the reconfiguration of the power relations as well as a change in the attitudes, strategies and perceptions of the institutions and institutional representatives. The process of liberal market reforms entails uncertainties. The local character of the market that constitutes and maintains uncertainties significantly affects the everyday lives of individuals.

The hazelnut market in Turkey generates an excess supply, which has become a contested matter in recent years. Given the prevalence of the changing and transforming market and the importance of hazelnut production not only in Turkey but also in the world, the problem of excess supply features a contradictory area of market processes, which entails uncertainties in the process of liberalization and market making.

Therefore, these features provide rich empirical data for analyzing the local constitution of the global market. In other words, a close focus on a one-product market creates a chance to be involved in every sphere of locality. As a result, a local market entailing debt relationships on the ground constitutes an ideal location in which to observe local power relations and their organic relationships at the heart of socio-technical controversies as well as their constituting processes. Uncertainties are

related to the change in the market and reconfiguration of the power relations during the agricultural transformation.

Along with the study of the hazelnut market, it is argued that what makes these mechanisms viable is the constructed uncertainty. From 2006 to 2009, the research on the hazelnut market provides how uncertainties are created during the market making and how the market making and maintenance have been affected by the uncertainty construction. The dissertation, with its focus on how the market works, analyzes each sphere of the market making and identifies the traces of the constructed uncertainties. With this analysis, the dissertation analyzes not only the market mechanisms but also the interaction between them and their implications.

The Research

The dissertation examines the problematic execution of liberal market reforms in a local setting. The analysis covers the period since 2000. Such an analysis reveals that the market formation is affected by the liberal/global system that is shaped within its locality. However, this interaction points out the impracticalities/impossibilities of purely rational implementations of liberal market reforms. The analysis of how market creation leads to the discussion of the social construction of uncertainty through textual and material devices. Therefore, the focus of the dissertation is the market making that is constituted by uncertainty during the liberalization process and its impacts on the market agents as well as its relations with each other.

Various forms of conceptual considerations describe how uncertainty is overcome and related to the market system. However, the dissertation analyzes how

uncertainty is created and maintained within the process of market making. The role of uncertainty in this process has remained largely unexplored and under-theorized in terms of both market making and the politicization processes constituted on the ground, especially in everyday life and also within the institutions that are analyzed in solely taken-for-granted areas of politics. Moreover, few anthropological accounts of marketplaces have been published in terms of the constructed uncertainty. In fact, the need for more research on the constituting role of institutions in shaping, maintaining and reproducing uncertainty is vital. The processes of market making embrace dynamic and never-ending controversies and market encounters (Çalışkan and Callon, 2009b).

In 2006, when the producer organizations organized the hazelnut protest, it constituted the peak point of the controversy between market groups, which are the producer and business groups.¹⁴ Since 2000, the hazelnut market had been experiencing a gradual transformation with the initiation of liberalization projects. In 2001, Fiskobirlik became a financially autonomous institution and was removed from the state support program. In 2004, a dramatic frost hit the hazelnut crop and brought on the highest spot prices ever performed (the highest at TL 8.26¹⁵ in October 2005). That year's price became a new reference point for the producer groups. In 2005, Fiskobirlik's purchase pricing was formed as higher than the price set in the previous year; however, the spot prices were lower than expected. The

¹⁴ The producer groups represent the interests of individual producers and producer organizations. The producer organizations include producer cooperatives (Fiskobirlik), the Chambers of Agriculture and other producer organizations (the Keşap Hazelnut Producer Organization, the Union of Hazelnut). However, the producer groups are represented and led by producer cooperatives and organizations. The business groups include traders, exporters, importers and intermediaries. The business groups are mainly represented by the Commodity Exchanges, exporters, the Hazelnut Promotion Group, the Chambers of Commerce in the hazelnut market. Therefore, business groups refer to the exporters and business organizations that have the power of price setting and to involve in the policy making processes.

¹⁵ All prices are for unshelled hazelnuts per kilogram.

financial difficulty of Fiskobirlik was derived from this price discrepancy. In 2006, the market produced new controversies to overcome these fluctuations and contested dynamics. The spot price decreased to TL 2.28 at the lowest level in August 2006. The market groups started reconfiguring their interests and identities to equate their forces. The protest came into being within such an uncertain environment in which the market groups created controversies in their making of the market.

Following the protest in 2006, I started investigating the motives and background of the protest. In my efforts to learn its dynamics, I conducted my first visit to Giresun, called the capital city of hazelnuts in the market. During the preliminary research, my interviews and observations centered on the high tension and controversy between the producer and business groups. At that time, in the local market, the vibrant producer side of the market controversy started losing power. This power shift resulted in anxiety about, hatred of and passion against the business groups. However, these attributes were only the visible part of the iceberg that had been constructed by the formal institutions. Throughout the research, conducted from 2006 to 2009, I observed an atmosphere that became stabilized, naturalized and even controlled.

Therefore, the dissertation probes the economizing uncertainty not only as risk calculation, but also as market formation processes that are socially constructed through power relations. The dissertation contributes to a better comprehension of how the agricultural transformation constitutes and shapes the local market, to what extent the economization process of uncertainty can or cannot deliver an analysis of its implications on the everyday life of the market making, how a weak degree of dialogism results in destructive uncertainty, and how such a analysis may reveal new

forms of market design that allow the emergence of new identities.

This dissertation centers on localities and everyday market practices on the ground through a combination of qualitative research and case study techniques. Detailed fieldwork involving face-to-face proximity with the individuals studied was a primary part of this research. The units of observation and analysis were included in the market settings, which included formal and informal institutions, price makers and producers. Therefore, the dissertation is concerned with human behavior and has broad interests in material things, formal and informal institutions and socio-technical controversies that constitute the market.

An actor-oriented approach is proposed instead of analyst-oriented approach in the determination of the mechanisms and of the market making. To actualize my approach, I engaged directly in the local market, informal and formal institutions, with the producers and the hazelnut product itself through production, calculation, exchange and pricing. As a reflection of the local perception, the local vocabulary was adopted in the writing of the dissertation. Such a local vocabulary also emphasizes the characteristics of the local market. For instance, the local language of “giving and taking” rather than “buying and selling” is used throughout the dissertation. This expression indicates the substantive relations of exchange based on give-and-take relations rather than the formalist relations of exchange based on buying and selling practices.

For my field research, I conducted 330 in-depth interviews, numerous participant observations, and comprehensive document analysis and used the case study approach. I analyzed these data and methods to reveal the processes of market formation during the agricultural transformation. In light of the preliminary

fieldwork completed between 2006 and 2009, my fieldwork began in the summer of 2009.

I employed a multi-sited ethnography to follow material things, individuals, connections and processes to be observed in diverse and spatially dispersed fields (Marcus, 1995). I conducted the fieldwork in four countries and twelve cities (Kocaeli, Düzce, Sakarya, Samsun, Ordu, Giresun, Trabzon, Ankara, Istanbul, Paris, Hamburg and Batum), as well as 63 of their villages. I spent six months in these provinces in the heart of the highly contested pricing processes and production, processing, exchange and calculation stages, in the little but lively ways of hazelnut marketplaces. I traveled along the abrupt, devious surfaces of village roads with no signs, and spent time in air-conditioned offices populated by representatives of formal and informal institutions.

The participant observations included producers, exporters, merchants, the Hazelnut Research Institute, Fiskobirlik, Agriculture Credit Cooperatives, the Chambers of Agriculture, the Hazelnut Union, the Exporter's Union, the Commodity Exchanges, and brokers. The participant observations were conducted in the natural environment of the market agents in order to understand by which methods and under what conditions estimations and calculations are conducted as well as to comprehend how the market is formed and how the local way of life is shaped during the processes of price formation and crop season. In a couple of cities,¹⁶ I attended public commissions, which regularly conduct the field research and analysis of the cost, output and area forecasts, and witnessed how the institutions are open to manipulation and misinformation and how these contribute to speculation with unreliable statistical data.

¹⁶ Wishing to maintain confidentiality, some of the names of the cities and people remain anonymous.

The story-telling method was used in the participant observations to probe the transformation of locality. This qualitative method provided enriched insight into how the borrowing relations turn into debt relations, how the global and local interact, and how the uncertainties are constructed through controversies and contested encounters. With this in mind, this method also allowed me to examine how uncertainty is constituted in market formation processes and what kinds of constraints the market agents confront these uncertainties in their everyday lives.

Over the six months, my connections were initiated through the trust relations of my linkages, which made the information I collected through the interviews reliable and consistent. Since I travelled alone, my connections helped me travel to the villages. During the interviews, the interviewees tried to get more information about me as well as my reasons for visiting, and asked about my *hard, secret and unwanted* questions. The *secrecy* depended on the extent to which the question to be asked or the information to be obtained were perceived to be *hard* and *secret* and thus one's secrecy might be the other side's strategy of power to be used as a challenge. Therefore, I made a point of telling as much about myself as possible in order to create confidence and a sense of security on the side on the interviewees or informants. More importantly, this confidence opened doors, networks and trust relationships, despite the limits of the transparency. I conducted in-depth interviews with 150 representatives of the formal institutions, 150 producers, 20 seasonal workers, and 10 operators of haymaker.

First, I interviewed the representatives of the formal and informal institutions: Seventeen factory owners/exporters, four politicians (one city governor, two deputies and one former deputy); forty-five hazelnut intermediaries, two representatives of the

Ministry of Agriculture, two of the Agriculture Research and Development Center, three of the Hazelnut Research Institute, fifteen of Fiskobirlik, two of the Agriculture Credit Cooperatives, sixteen of the Chambers of Agriculture, four of the Hazelnut Union, five of the TGB, five of the National Hazelnut Council, seven of the Export Unions, thirteen of the Commodity Exchanges, three brokers, two academics, and five journalists.

Second, on the ground, I reached individual producers in their houses or village coffee houses. They included primary producers, those who produce hazelnuts as secondary income, producers who come from urban areas during the crop season, tenant, seasonal workers and sharecroppers. Together with participant observations in numerous villages, I conducted in-depth interviews with 150 producers from 63 villages, 20 seasonal workers, and 10 operators of haymakers (*patoz, harvest machinery*). Both producers and institutions were eager to be interviewed and help such an academic study; hence, revealing the purpose of the research proved convenient.

A Summary of Empirical Findings and Theoretical Arguments

The dissertation is structured in eight chapters. Throughout the chapters, the process of market making is examined in relation to market encounters. These encounters comprise the policies of agricultural transformation, the production and calculation, the exchange relations, the informal institutions, the formation of market prices, the formal institutions, and constructed uncertainties.

Chapter 2 explains the agricultural transformation in Turkey and its

implications for the hazelnut market. Providing a descriptive account, the chapter introduces the concepts, institutions and the legislative changes in the local market. It concludes with a number of arguments. First, the economic crisis led to the rapid adaptation of the reform packages of the international institutions, which led to the reconfiguration of the power relations at the local market. Second, the legislative changes have been met with strong resistance at the local level, which indicates the inconsistencies in the implementation of the reform policies on the ground. Third, the complexity in the implementation of the reform policies has resulted in uncertainty; therefore, it is not the solely state support that distorts the market. The uncertainty in support programs and policy implementation creates market distortions. Fourth, it is not only the change, which is implied by the liberalization and globalization, that produces the crises. The local market dynamics also contribute to the crises.

Chapter 3 describes the nature of hazelnuts, the conditions of the producers on the ground and the agencies that are involved in the calculation of hazelnuts. The chapter starts with the story of the 2004 frost by introducing the fragile market conditions that were vulnerable to natural crisis. The politics of calculation are examined with the focus on the uncertainties created through everyday practices and individual perceptions in calculating hazelnuts.

The chapter discusses how the economic artifacts are connected to human relations and how both contribute to the irreparable damage of the natural crisis. Due to the manipulation of tools and the lack of objective calculation, the market actors may not necessarily manage their actions and the uncertainties in production, asserting the lack of systemic production, the changing costs of hazelnuts, and the lack of mechanization.

Chapter 4 analyzes the local exchange and informal institutions. It explains the buying and selling relations in the hazelnut market and how informal institutions are created on the ground. The exchange relations and informal institution are related to informal network and trust relations. The chapter provides an understanding of how informal relations are constructed and how these relations have changed over time. The chapter also reveals how diverse the local market constitution is as it is considered along with the exchange relations and informal debt relations. Furthermore, the interaction between the informal and formal institutions discloses the competition between these spheres. The competition exposes the role of informal institutions in the maintenance of the market.

Chapter 5 describes the hazelnut price tiers, which are identified as support purchase price, forward price and spot/export price. The chapter analyzes the interaction between these price tiers and their making through strategic partnerships. The informal relations derive from two spheres, at the global level (between importers and exporters), and at the local level (exporters, intermediaries and producers). The price making uncovers the interaction between the global and local market actors. The price makers include exporters, importers and the state, which also constitute the market groups. Their power is identified as the ability to create control and intervene in uncertainties. However, each market agent has an indirect impact on the price formation. The chapter examines the shifting power relations and dynamics. Three case studies are analyzed in the chapter. First, Fiskobirlik's price policy in 2005 on the basis of historic prices resulted in the ever highest purchase prices in the local market. Second, the case of crop and price formation in 2009 similarly shows how the actions of market actors are based on forecasts of the

amount of crop, the state actions and spot prices. Third, the cases of the hazelnut kings¹⁷, Başkan Gıda and Oltan Gıda, provide insight into the strategic partnerships between global buyers and sellers.

Chapter 6 analyzes the formal institutions and how they create rhetorical devices through categorizations, symbols, metaphors and how they stand on emotions, suspicions and threats. The chapter asks what the social construction of uncertainty through discursive actions is. The chapter examines how the market groups create uncertainties through rhetorical devices and how their interests change over time. It shows how the interests of market groups change from the 2006 protest to the 2009 Hazelnut Strategy. The change in the interests of the market groups necessitates the analysis of the dynamics of socio-technical controversies. The section analyzes the 2006 protest as a case study of the construction of rhetorical devices. The power of the formal institutions in the creation of the rhetorical devices is identified as the ability to construct rhetorical devices, to create uncertainties, and to intervene into these uncertainties. The power is also related to the ability to manipulate and to penetrate the flow of information through media.

Chapter 7 focuses on how the market is constructed by uncertainties and vice versa. Uncertainties cannot be reduced through rational choice strategies. The concept of uncertainty is related to the interference in unknowns, rather than to equilibrium and risk. The chapter provides an analysis of the weak degree of dialogism in the construction of the Hazelnut Strategy. The chapter examines how the asymmetry between specialist and non-specialist as well as between representatives and those they represent led to the weak and instable implementation of policies that disabled individuals in the face of uncertainties.

¹⁷ The largest exporters in the market are called the “hazelnut kings” [*findik kralı*].

Chapter 8 concludes with the summary of research findings within the research program to examine the processes of market making. The chapter discusses the main findings in relation to the encounters between goods and calculative agencies, the different price tiers, the formal and informal institutions in market maintenance, and the socio-technical controversies that exclude ordinary citizens and non-specialist with weak dialogism. The chapter also discusses new forms of market design and gives suggestions for further research.

CHAPTER 2

A REVIEW OF THE AGRICULTURAL TRANSFORMATION IN THE HAZELNUT MARKET

Since the 1980s, structural adjustment policies have been introduced with the aim of liberalizing the economy and opening the market to international exchange. The agricultural sector has become one of the contradictory areas in which dramatic changes have occurred as a result of the liberal policies. The agricultural transformation in Turkey embraces remarkable regulatory changes and institutional restructuring. The basis of this transformation has been shaped by agricultural policies launched with market reform measures initiated by IMF and WTO policies, World Bank Projects as well as EU reforms (Yalçınkaya, 2009; Öniş, 2006; 2009; Köse, et al., 2007).

The common point of reference to agricultural reforms indicates both neo-classical economic and neo-institutionalist stances as a reference to the concepts of growth, efficiency, competitiveness, privatization and thus the search for pure market rationality through effective and embedded institutions. Considering the agenda of agricultural transformation, the focal points are market optimality and equilibrium, which are to be achieved through non-price support measures that are supposed to prevent market distortions. However, it is not the nature of support mechanism that creates distortions. Instead, the uncertainty in the procedures and implementation of support programs create market distortions. The uncertainty concept in the market

reform projects is taken into account through price, production decisions, exchange relations and exchange networks.

However, it becomes important to analyze the uncertainty concept, how it is created, manipulated and intervened. While the following chapters will examine these questions, this chapter provides insight into the agricultural transformation in the hazelnut market in Turkey from the perspective of the economy of uncertainty during the process of globalization. Globalization may be viewed as a process in which market relations flourish and also the new forms of politics have contributed to the configuration of this process (McMichael, 1996, 1997; Rieger and Leibfried, 2003).

The term “globalization” itself has become a process of change for the reconsideration of global/local tensions (Held and McGrew, 2002). Similarly, “the new industrial system is neither global nor local but ‘a new articulation of global and local dynamics’” (Amin and Robins, in Castells, 1996, p. 392). This diversity points out similar and/or diverse politics at multiple levels in the process of integration with world markets (Cancian, 1972; Boehlje, 2004; Mills and Blossfeld, 2007; Lynn and Parr, 2002; Hermans and Dimaggio, 2007).

The globalization of the hazelnut market includes changes in the conditions of production, the politics of pricing, the living standards of the producers and the characters and structures of actors and negotiations between them (Keyder and Yenal, 2011). Therefore, the agricultural transformation includes the politics of controversies and bargaining within and between international and local institutions. In light of this framework, the globalization process needs to be analyzed to uncover all the spheres of global market that include local, regional and global actors,

international and regional institutions, reform policies and the transformation of everyday life at the local level. The subsequent chapters aim to analyze these market encounters.

Thus, globalization embraces change that includes uncertainties through which reform packages lead to various reflections in different localities. In the case of the hazelnut market, the decision-makers and practitioners of the transformation are mainly local and international institutions, the state mechanism and governments, producer's organizations (i.e., Fiskobirlik, the Chamber of Agriculture), the EU, bureaucratic regulatory bodies and political institutions like expert boards.

Throughout the period from 2001 to 2009, the story of the liberalization of the hazelnut market included contested controversies, struggles, resistance and crises. This chapter introduces the economy and politics of uncertainty during the process of the liberalization of the hazelnut sector. The liberalization process is analyzed from the beginning of the 2000s with the initiation of market reform policies that shifted the role of producer cooperatives and support mechanisms. The Hazelnut Strategy initiated free market price setting on July 14, 2009 was a significant milestone of the liberalization process.

With these in mind, this chapter provides a descriptive account of the agricultural transformation in Turkey, with a specific focus on the hazelnut market. The agrarian change in Turkey will be discussed through an examination of the execution of market reforms as well as legal and regulatory adjustments. This chapter intends to provide a general framework on the agricultural transformation in Turkey and to introduce the institutional transformation that was experienced since the 1980s. A critical point of view and in-depth analysis towards the impacts and

dynamics of these changes will be provided in the following chapters.

Market Crises and Agricultural Transformation

Economic crises facilitate the initiation of the policies of international institutions and the rapid implementation of free market policies (Hirschman, 1985; Weyland, 2002; Pitlik, 2010; Drazen and Grilli, 1993). During the times of crises, the policies of agricultural transformation are characterized by a dynamic environment of change that produces uncertainties. This section intends to provide an example on how the agricultural transformation in Turkey progressed in parallel to the consequences of economic crises within the period under study.

The Turkish economy experienced a period of rapid economic growth and structural transformation during the 1960s and early 1970s followed by severe disequilibria towards the end of the 1970s. Accelerating inflation, a massive balance of payments deficit and declining growth led to attempts at economic stabilization from 1978 (Şenses and Öniş, 2009). Following these difficulties, the January 24 Decisions launched in 1980 introduced liberal economic policies by adopting unregulated interest rates and floating exchange rates. The liberalization of imports brought a new growth strategy based on an export-oriented market economy.

After the crises, the liberalization of agriculture began with cuts of indirect supports (Aydın, 2009). From the 1980s to the mid-1990s, agricultural reform policies were shaped by support mechanisms in order to regulate the market and to manage production and exchange. During this period, the government acted as both supplier and buyer by implementing support policies including direct intervention

into input and output prices, subsidized bank credits and purchase prices (Aydın, 2002). From the 1980s to the 1990s, the market price support decreased and became a tool of populist policies. Between 1986 and 1988, output and input-based supports constituted all of producer supports (OECD, 2007).

As a result of these policies, agricultural investments declined by 56 percent (Boratav, 1991) and during the period from 1983 to 1988, agricultural support programs in Turkey were dismantled (Pamuk, 2008). The share of agriculture in the labor force and in the GDP declined by 33 percent and by 28 percent, respectively, from 1950 to 1980 (Pamuk, 2007). Furthermore, from 1998 to 2010, the agriculture percentage of the GDP has dropped from 13.5 percent to 9.6 percent (Country Data, 2011).

The 1990s were characterized by the internationalization of agriculture through policies initiated by international institutions. Turkey, similar to other developing and transition countries, confronted severe economic crises during its integration into the global economic system. In 1997 and 1998, Turkey underwent a currency crisis that resulted in the devaluation of the Turkish Lira.

Also, the consecutive economic crises in 2000 and in 2001 set up the base for the adoption of neo-liberal economic austerity measures initiated by international institutions. The country experienced a turning point through neo-liberal restructuring (Öniş, 2009). Again, new institutions were created, such as expert and regulatory institutions, to execute structural changes. These policies also were related to dramatic impacts on small-sized, family-owned producers (Aydın, 2010).

In 2001, in parallel to the financial crisis in the country, like other sectors in Turkey, the hazelnut market entered into a debt crisis. The hazelnut “kings” – until

then thought of as indestructible –collapsed due to the devaluation of the Turkish Lira following the economic and financial crisis of 2001. Başkan Gıda, one of these kings, the largest exporter, went bankrupt during that period. The bankruptcy of Başkan Gıda is still cited as a reference to depict the uncertain nature of hazelnut market as a traumatic memory and perception of this collapse. After this bankruptcy, many exporters, factory owners, traders, merchants and grocers of the hazelnut market, both large and small, also went bankrupt as they had relied on a single source, the most powerful hazelnut king, the largest exporter. These successive fluctuations in 2001 and 2002 caused a decrease in the number of merchants and grocers due to the chain bankruptcies.

The market restructuring was shaped within a policy framework on liberalization policies introduced by the IMF and the World Bank and adopted due to the diminishing significance of subsidies and state control (Aydın, 2010). These policies were embodied by the Agricultural Reform Implementation Project (ARIP), introduced by the World Bank and approved in May 2000.

World Bank Agriculture Reform Implementation Project in Turkey

The ARIP, initiated by the World Bank in 2000, proposed structural adjustments not only in economics, but also in the areas of politics, law and society. After the initiation of the project, market-oriented reforms targeted the withdrawal of state intervention in market forces as well as the removal of the regulation of prices and production. The project might be characterized as an attempt to transform the agricultural sector through liberalization policies and also reduce the “costs” of

agriculture. The project identified three components: direct income support (DIS), farmer transition,¹⁸ and the restructuring of the Agricultural Sales Cooperatives and Unions (ASCs/ASCUs).

In the Project Document (WB, 2001, p. 5), the following assertions were included:

In light of the economic crisis that began in February 2001, reaching the objective of sustained growth and reduced economic vulnerability requires Turkey to undertake accelerated structural reform, while working quickly to recover from the crisis and mitigate its worst effects. ... Thus, the Bank Group's strategy now is to focus on helping Turkey recover from the crisis while dealing with the deeper causes of the crisis - especially its large and inefficient public sector and fragile banking system - and address increasing social hardships ... The ARIP would also help with the cost to farmers of shifting from uneconomic to more competitive crops in the newly market oriented environment. The ARIP also provides a key element for monitoring the social impact of the crisis and the overall reform program, through the agricultural household survey planned as part of the social monitoring and evaluation.

Considering these political and institutional changes, similar to the EU and IMF restructuring and liberalization reforms, the ARIP initiated a complete perspective based on neo-classical economic principles. The ARIP removed the “unsustainable and distortionary system of subsidies for fertilizer, credit and price supports ... and [*linked*] prices to world market prices” (ARIP, 2002).

As a reference to the project document (WB, 2001, p. 3), the objective of the ARIP was identified as follows:

... to help implement the Government's agricultural reform program, which is aimed at dramatically reducing artificial incentives and government subsidies, and substituting a support system that will give agricultural producers and agro-industry incentives to increase productivity in response to real comparative advantage. At the same time, the project is designed to mitigate

¹⁸ The ARIP proposed farmer transition to “help farmers make the transition to alternative activities as the governmental supports are reduced” (ARIP, 2002).

potential short-term adverse impacts of subsidy removal, and facilitate the transition to efficient production patterns. Aside from promoting allocative efficiency the reforms to be implemented are necessary for fiscal stabilization.

In fact, the globalization process changed and shifted not only power dynamics in the world, but also local relations on the ground. In particular, the project document included a constant emphasis on terms like “efficiency,” “competition,” and “the diminishing role of the state,” especially in policy areas such as price intervention and agricultural support. However, they disregarded the whole picture of locality and everyday life (Çalışkan and Adaman, 2010). Therefore, the market reforms could only be partially implemented due to how they overlooked the structural characteristics of the countryside (Rodrik, 2002), and the populist policies during election periods, which distorted the “efficiency” of the state support mechanism (Lundell, et al., 2004).

Especially from the early 2000s, international institutions started taking into account the sustainability of these reforms in various countries and regions. It was proposed that since agriculture was the primary source of income in developing countries, agriculture might be a tool for economic growth by strengthening smallholder farming in accordance within their diverse localities. However, the decrease in the rate of public spending on agriculture as a share of total public spending in transforming countries indicated the adverse results of recent reforms (WDT, 2007). The fait accompli adoption of global market reforms resulted in complete uncertainty for market agents. The following section analyzes the specific example of the hazelnut market, which experienced agricultural transformation.

Structural Reforms in the Hazelnut Market

Structural reforms in the hazelnut market were related to the changes the market had been experiencing. Throughout the dissertation, the changes that occurred in the market are referred to, yet none of them may be characterized as the turning point. This section introduces legal and administrative changes that occurred from 2000 to 2012.

Direct Support Payments

Neo-classical economics identifies agricultural subsidies and supports as market-distorting actions that result in government intervention. In the period under discussion, agricultural restructuring and reform policies proposed that state subsidies and fluctuations in price support had become “burdens” on the country’s macroeconomic stability (Lundell et al., 2004) and created “distortions” in the reliance on market forces. In 1986, the WTO Summit in Uruguay formalized the neo-classical approach to diminishing agricultural subsidies and government intervention. With regard to the WTO’s stance on agriculture, three policies that “distort” agricultural trade were defined as limits on market access (i.e., tariffs, tariff-rate quotas), domestic support (i.e., subsidies, price support that increases prices, output and input linked supports), and export subsidies (i.e., export competition) (WTO, 2001).

Similarly, the OECD Report (2001) identified three mechanisms through which policies affected production and trade with an obsessive effort to model or create a

perfect market. The mechanisms that affect the “market power” concerned were as follows: static effects without no risk or uncertainty (market price supports, payments based on output, quantitative restrictions), risk averse effects (uncertainties in prices and farm income), and dynamic effects (expectations concerning government in different periods). Although these effects were assumed to be cumulative and act simultaneously, the neo-classical approach accepted in these reports intends to justify market rationality and pure market conditions to eliminate the gap between domestic prices and world prices and to reach so-called market equilibrium.

In 2000, with the initiation of the ARIP, agricultural supports were transformed dramatically into direct supports, yet in a decreasing fashion to minimize the weight of the subsidies on the public budget. The subsidies were mostly direct supports such as area-based agricultural supports (for seed, oil, soil analysis, and pesticide, alternative products), coupled and decoupled payments,¹⁹ deficiency payments, livestock supports, rural development, agricultural insurance, compensatory payments, certified products, production and environmental supports and Research and Development supports (TUGEM, 2010; Babacan, 2000).

The ARIP proposed the DIS by initiating an annual payment to be granted on a per hectare (maximum 500 hectares) basis to all farmers registered with the National Farmer Registration System. The project aimed to “assist the government to introduce a unified national program of DIS for all farmers which will be simple, transparent, and will not distort the incentive structure as does the current system”

¹⁹ According to the OECD Glossary (2001), decoupled payments are defined as “budgetary payments paid to eligible recipients who are not linked to current production of specific commodities or livestock numbers or the use of specific factors of production.”

(ARIP, 2002). The payment system, which excluded areas that were smaller than one hectare, damaged small-sized producers.

With the idea of protecting market imperatives, such as efficiency and pure market rational, the DIS intended to remove any obstacles to and distortions of market principles. In other countries, the support mechanism had been transformed with a similar fashion. In the USA, for instance, in 2002, the Production Flexibility Contracts payments were replaced by direct payments and countercyclical payments.²⁰ In 2003, these payments also were reduced. Likewise, in the EU, the Single Farm payment of the Common Agricultural Policy Reform as a mode of DIS had become a main support instrument, especially since 2003 with a similar decline in subsidies (OECD, 2005).

The idea of the DIS system was to eliminate production distortions by providing support on the basis of land ownership (OECD, 2007). However, the system came to protect the landowner rather than producer and output. Between 2002 and 2004, despite the reductions in the output- and input-linked supports, the 25 percent of increase in supports to producers was composed of DIS payments, which provided benefits to subsistence farmers, rather than output and input-linked support, which benefited larger farms (OECD, 2005).

The major problems in the DIS system in the hazelnut market arose due to the lack of completed land registry systems and cadastre. Most of the farmers were not the owners of the land; they were mostly users, title sharers, renters or share croppers. Some plots had more than one owner; or the legal owners might not have been the primary producers. Therefore, since the land owners had not registered their

²⁰ Counter-cyclical payments are available whenever the commodity's effective price is less than the target price (USDA, 2010).

ownership status completely and properly, the system led to land divisions and difficulties in reaching full information on property and ownership.

The systems of land and farmer registry also put more of the pressure of legal responsibility on farmers, which led to even more incorrect information gathering. The system based on a fixed payment may possibly have directed farmers to a low cost and easy way of production without any further agricultural investment. The inadequacy and insufficiency of the system created problems of excess supply and marketing problems. DIS payments were not always used in agricultural activities. In various studies, it has been proved that a significant amount of DIS payments were used for non-agricultural activities (Yılmaz et al., 2008; Aydın, 2002).

Beside the DIS system, the support mechanism in the hazelnut market also involved other support tools. These included state purchases (from 1963 to 1994), price supports through cheap state credits²¹ (from 1994 to 2001), and the production of hazelnut oil with excess hazelnuts (from 2001 to present). The intervention agency on behalf of the state was undertaken by Fiskobirlik until 2006 and then by the TGB from 2006 to 2009. In 2009, the state intervention was brought to an end by law. With the Hazelnut Strategy, for three years between 2010 and 2012, the producers, who have the hazelnut farmer's certificate, would be provided support payments.

As a result of the diminishing state purchases, between 1964 and 1993, the share of the purchases of Fiskobirlik in production dropped from 44 percent to 20 percent as compared to the period from 1994 to 2000. The hazelnut purchased by Fiskobirlik made up less than 50 percent, except in 1989. During the period of 1964-2003, Fiskobirlik purchased 33.5 percent of the total supply on average. The reasons

²¹ The state credits are considered to be the Support and Price Stability Fund, or *Destekleme ve Fiyat İstikrar Fonu* (DFIF) to be provided for Fiskobirlik by the State Treasury.

behind this decrease include the excess supply of hazelnuts, the financial difficulties of Fiskobirlik, and the changing role of Fiskobirlik in acquiring the excess supply (Bozoğlu, 1999). Furthermore, the decrease was related to the changed purchase system of Fiskobirlik. Until 1994, every hazelnut producer had been allowed to sell to the cooperative, but after 1994, only cooperative members could. Thus, only producers who were members of Fiskobirlik could provide incentives from the support purchases of the governments (Table 1).

Table 1: Volume of Hazelnut Support Purchases

Year	Crop Volume (Tons)	Fiskobirlik's Purchase (Tons)	Shelled Hazelnut for Oil (Tons)	Hazelnut Purchased by Fiskobirlik (%)
1989	550,000	370,815	157,000	67
1990	375,000	129,591	22,000	35
1991	380,000	85,145	58,000	22
1992	530,000	186,216	6,880	35
1993	300,000	2,221	10	1
1994	600,000	62,691	38,500	10
1995	435,000	34,292	1,620	8
1996	464,000	105,095	66,456	23
1997	470,000	64,664	64,341	14
1998	595,000	238,780	214,766	40
1999	546,000	142,387	140,701	26
2000	480,000	91,648	32,212	19
2001	705,000	128,864	0	18
2002	620,000	48,488	0	8
2003	450,000	8,169	0	2
2004	360,000	16,928	0	5
2005	600,000	51,138	0	9
2006	780,000	44,932	0	6
2007	555,000	3,058	-	1

Source: Fiskobirlik, 2007.

Since the planning was deficient in creating the support mechanisms to preserve the socio-geographic configuration, the ARIP failed to be implemented as it was planned

at the local level.²² In 2008, the DIS system was replaced by area-based support payments within the specific product group and region in 2009. The Model of Agricultural Districts Production and Support, announced by the Ministry of Agriculture on June 1, 2009, proposed the determination of agricultural districts according to product groups, production planning, demand projections, the “rational and effective” use of agricultural support, sustainability and food security. It was targeted to encourage the production of the desired crops at the expense of undesired ones in order to prevent the burden of supply-demand imbalances. The projection of demand and supply balances was targeted with rational calculations for the planning of agricultural production and support.

The model proposes a new definition of production and development plans according to ecological borders instead of administrative and regional borders. A list of suitable crops was compiled for different regions and links instruments of support to regionally-based crops. Based on climatic, topographic and geologic data, 32 different agricultural districts were defined. The model plans to provide agricultural supports for products that were produced in these defined districts to delimit support payments within these territories. The Hazelnut Strategy initiated in 2009 also represented the basis of this Model. The hazelnut region was classified within the cities of Giresun and Ordu in Agriculture District No. 4. Similarly, with the Hazelnut Strategy, the support payments were limited and the only areas that were supported were located in the west Black Sea region. The measures were initiated by the international institutions to determine which crops, in what quantity and quality should be produced (Aydın, 2010).

²² Therefore, out-migration from weakly supported regions to strongly supported ones was possible.

Excess Supply of Hazelnut and Disabled State Action

Turkey is the largest hazelnut producing country in the world, with almost 75 percent of worldwide production. Hazelnuts are also produced in Italy, Spain, Greece, the United States, Azerbaijan, Georgia and Chile. Below, the Figure 2 depicts the increasing trend of Turkey's hazelnut production.

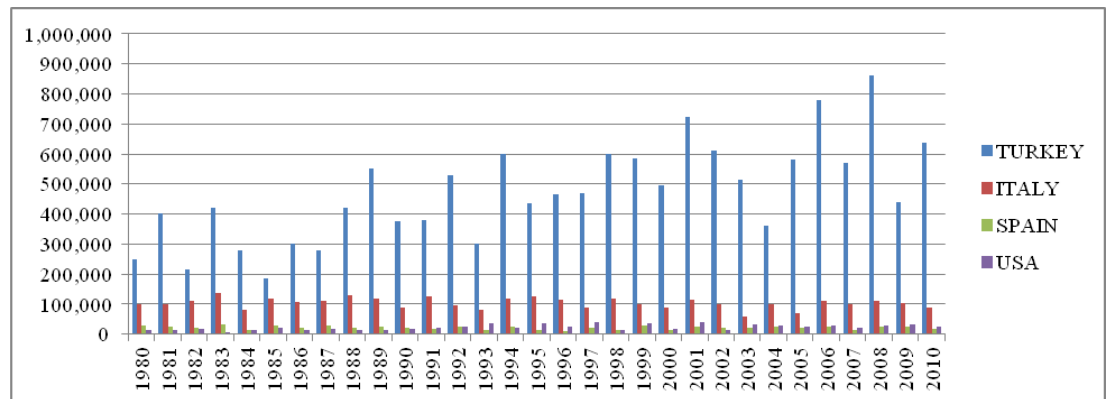


Fig. 2: Hazelnut Production in the World, 1980-2010 (1000mt)

Source: Fiskobirlik, KIB, 2011.

Since the 1980s, hazelnut production areas rapidly expanded in 35 cities, which are classified as First Standard Region (Giresun, Ordu, Trabzon, Rize, Arvin) and Second Standard Region (Düzce, Sakarya, Kocaeli, Bartın, Kastamonu, Sinop, Samsun) as well as in Istanbul and Bursa. The hazelnut production in Turkey is over-supplied due to the steady increase in production areas since the 1980s (Figure 2). Whereas, in 2008, 860,000mt of hazelnut was produced; in 2009, the amount dropped to 440,000. The Figure 3 also depicts the instability in the production volume in the hazelnut market in Turkey (Figure 3).

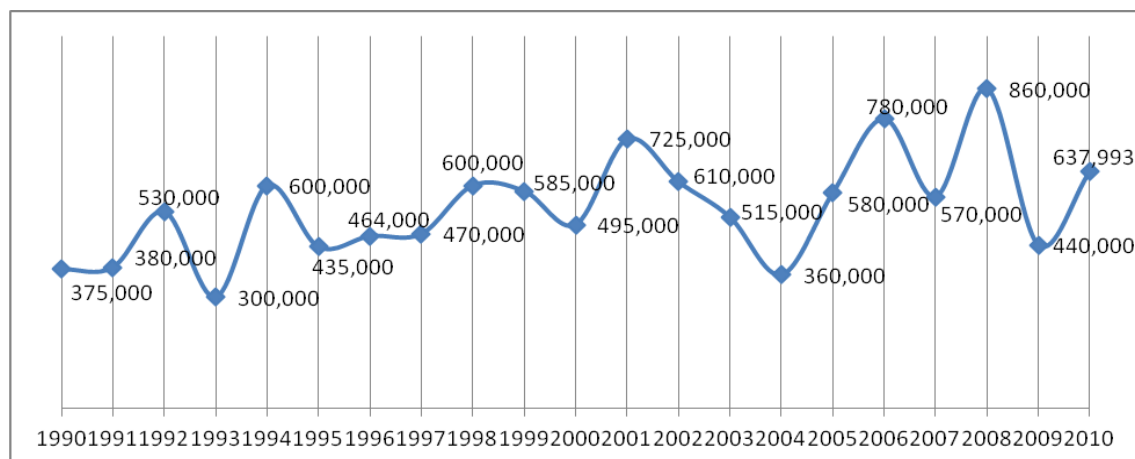


Fig. 3: Hazelnut Production Volume (Mt)

Source: Fiskobirlik, KİB, 2011.

Turkey exports almost 50 percent of its supply and consumes almost 30 percent of hazelnut production in the domestic market (Table 2). The excess hazelnut supply constitutes a significant problem in terms of policy decisions in support and pricing. Therefore, since the 1980s, the state has attempted to regulate and control the expansion of hazelnut production with a number of laws and regulations.

Table 2: Unshelled Hazelnut Production and Consumption (1000mt)²³

Production	2006-07	2007-08	2008-09	2009-10	2010-11	Oct.2011-12
Turkey	800,000	550,000	780,000	470,000	570,000	400,000
EU-27	145,000	128,000	149,000	105,000	105,000	145,000
USA	39,010	33,570	29,030	42,640	25,400	37,200
Azerbaijan	18,000	28,000	20,000	32,000	26,000	35,000
Total	1,002,010	739,570	978,030	649,640	726,400	617,200
Domestic Consumption						
EU-27	383,500	337,300	377,600	332,300	370,000	415,000
Turkey	244,700	219,100	253,700	256,800	272,400	250,000
Russia	23,100	28,400	24,300	23,400	27,000	25,000

²³ Hazelnut marketing year begins in July of the first year of the split year for the United States and certain other Northern Hemisphere countries, and August of the first year for Turkey (USDA, 2011).

Canada	13,000	16,300	16,300	20,200	23,500	23,000
Switzerland	24,600	22,900	23,200	20,700	22,900	21,000
USA	24,040	16,780	15,800	15,200	17,315	15,470
Australia	4,700	5,400	4,100	5,100	5,600	6,000
Brazil	6,900	7,500	6,300	6,600	5,800	6,000
Azerbaijan	5,200	6,500	5,400	5,600	5,000	5,000
Ukraine	5,300	4,800	4,300	5,200	4,900	5,000
Other	13,200	12,700	14,500	14,300	14,500	11,500
Total	748,240	677,680	745,500	705,400	768,915	782,970
Ending Stocks						
Turkey	300,000	335,000	525,000	425,000	350,000	152,500
USA	2,770	2,210	1,290	2,655	2,270	3,000
EU-27	14,300	7,300	5,000	3,100	1,900	1,900
Total	317,070	344,510	531,290	430,755	354,170	157,400
Exports						
Turkey	340,000	300,000	340,000	315,000	375,000	350,000
Azerbaijan	12,800	21,500	14,600	26,400	21,000	30,000
USA	26,490	30,890	24,240	34,250	19,590	30,000
EU-27	9,000	16,000	14,400	13,600	11,200	10,000
Hong Kong	11,500	5,400	9,800	12,900	8,600	10,000
Total	399,790	373,790	403,040	402,150	435,390	430,000
Imports						
EU-27	254,600	218,300	240,700	239,000	275,000	280,000
Russia	23,100	28,400	24,300	23,400	27,000	25,000
Canada	13,000	16,300	16,300	20,200	23,500	23,000
Switzerland	24,600	22,900	23,200	20,700	22,900	21,000
Hong Kong	15,100	8,100	15,800	19,000	13,400	12,000
USA	13,640	13,540	10,090	8,175	11,120	9,000
Australia	4,700	5,400	4,100	5,100	5,600	6,000
Brazil	6,900	7,500	6,300	6,600	5,800	6,000
Ukraine	5,300	4,800	4,300	5,200	4,900	5,000
Norway	2,700	3,300	2,800	2,100	2,300	2,500
Other	11,600	10,800	9,400	7,900	9,800	9,500
Total	375,240	339,340	357,290	357,375	401,320	399,000

Source: USDA, (2011). Retrieved on February 12, 2012 from <http://usda01.library.cornell.edu/usda/fas/treenutwm//2010s/2011/treenutwm-10-21-2011.pdf>.

With the aim to plan hazelnut production and to regulate supply-demand balance, in 1983, Law No. 2844 on the Planning of Hazelnut Production and Determination of

Cultivation Areas was issued. However, from 1983 to 2012, the law was not implemented as proposed and was adjusted many times with different regulations. Law No. 2844 proposed that, following six months after the enactment, hazelnut production areas would be restricted. It also obliged that (within six months after the enactment of this law);²⁴ hazelnut producers would declare their production areas so that they were given Hazelnut Producer Certificates.

The law also initiated prohibitions that no one could produce or renovate hazelnuts without a necessary allowance, in case these areas were uprooted within six months. It was also proposed that alternative products might contribute to the country's economy. The hazelnut production was allowed in the city centers and a few districts of Giresun, Ordu, Trabzon and districts of Akçakoca, Alaplı, and Ereğli.

The Regulation of this law, enacted in 1983, was published, after six years, in 1989. According to the Regulation, hazelnut production was restricted in areas with the altitude above 750 meters and in the slope more than 12 percent and with production capacity at class of fourth and above. However, in 2001, the Regulation was removed with a Decision of the Council of Ministers (2001/3267) according to which, hazelnut production was allowed in 13 cities and their defined districts. The production was only restricted in 3rd class agricultural areas with a slope of less than 6 percent, and areas above 750 meter altitude in the defined cities and districts (Table 3).

²⁴ The new regulation enacted in 1990 changed the time period as one year.

Table 3: Cities and Districts Permitted for Hazelnut Production

1 st Standard Area	
Giresun	Center, Bulancak, Keşap, Tirebolu, Görele, Eynesil, Espiye, Dereli, Çanakçı, Güce, Doğankent, Yağlıdere, Piraziz
Ordu	All districts
Trabzon	All districts
Rize	Ardeşen, Fındıklı, Pazar
Artvin	Borçka, Arhavi
2 st Standard Area	
Kastamonu	Abana, Bozkurt, Cide, Çatalzeytin, İnebolu
Kocaeli	Kandıra
Sakarya	Kocaali, Karasu, Akyazı, Hendek
Samsun	Çarşamba, Terme, Ayvacık, Salıpazarı
Sinop	Center, Ayancık, Türkeli, Erfelek, Gerze, Dikmen
Düzce	Akçakoca, Cumayeri, Gölyaka, Çilimli, Gümüşova, Yığılca
Zonguldak	Alaplı, Ereğli
Bartın	Merkez, Amasra, Kurucaşile

Source: *Official Gazette*, 2001/3267.

In 2002, the ARIP's farmer transition component was initiated to "encourage farmers to quit producing crops which are currently heavily over-produced by offering one-time payments to cover their cost of switching to alternative activities" (ARIP, 2002). Accordingly, the ARIP proposed that farmers could uproot their hazelnut trees, if they wished to do so, collect the portion of the grant for this purpose, sell their land, and then to use the grant proceeds to start an alternative activity. The aspiration was based on pricing decisions to eliminate the so-called "artificially high price" of hazelnuts (ARIP, 2002). As a part of the farmer transition program, in 2003, a new Regulation was enacted (2003/5495) proposing that hazelnut production would be carried out only in the above-mentioned cities and districts lower than 750 meters attitude, more than 6 percent of slope at 3rd class production areas and production capacity at 4th class and above (Table 3).

The Table 4 below depicts the support payments for alternative product to

Central Black sea region, where the hazelnut production was initially restricted (i.e., Samsun).

Table 4: The Support Payments for Alternative Products and the Number of Producers

Cities	Number of Producers	Area (Hectare)	Payment (\$)
Artvin	1	20.0	4,000.0
Bartın	0	0.0	0.0
Düzce	59	390.3	78,066.4
Giresun	6	209.7	41,945.4
Kastamonu	0	0.0	0.0
Kocaeli	9	83.2	16,650.2
Ordu	181	431.0	86,200.0
Rize	1	2.0	400.0
Sakarya	98	1,053.4	210,681.8
Samsun	456	9,267.7	1,853,548.0
Sinop	0	0.0	0.0
Trabzon	0	0.0	0.0
Zonguldak	26	172.9	34,580.0
Total	837	11,630.2	2,326,072.0

Source: Incekara, A. and Bayrakli, S. A. “Fındık Üretim ve Üretim Planlaması” [*Hazelnut Production and Production Planning*] 3. Fındık Şurası [3rd National Hazelnut Council], 10-14 October 2004, Giresun, Turkey.

The alternative product project was initiated for flat lands of 11,630 hectares with compensatory payments of the total \$2,326,072 (Table 4). However, the producers hesitated to get involved in this kind of project for various reasons, among which it is identified as (Bozoğlu, 2001a; 2001b; 2005a; 2005b):

- Relatively low labor-intensive production,
- The lack of necessary labor power for another product,
- The low level of return on income in producing another product and the relatively high profitability of hazelnut production,

- The long storage time,
- The state's on-going support purchases,
- The large number of producers living outside of hazelnut producing regions,
- The problem of losing hazelnut registered cadastre.

Despite the sets of laws and regulations, hazelnut production expanded from the east to the west and central Black Sea regions in an uncontrolled fashion. The geography of these regions is very different from that of the east part of the region, with flat areas with high yield levels with high product diversity. However, from the 1970s, hazelnuts became an alternative to rice, corn, vegetables and wheat.

Farmers see various advantages to shifting to hazelnut production. First, hazelnut production requires less time, daily care and energy in the production process. Second, the presence of the regulatory agency (i.e., Fiskobirlik, TGB) which purchases hazelnuts constitutes a guarantee for purchase.

Third, on the ground, debt-credit relationships between merchants and producers, as informal support mechanism, constitute further explanation for the expansion of hazelnut production areas. As such, the subsequent development of hazelnut production throughout the Black Sea region has shaped the exchange relationships, especially in the central Black Sea, apparently different from other regions in a way that producers and grocers are more interpenetrated with each other.

Fourth, the relatively higher support purchase price as compared to the spot price encourages hazelnut production. The product transition from other product groups to hazelnuts in this region has taken a short period of time, such as one year to uprooting and five years to harvest crops. Hazelnut roots were brought by local

people from Trabzon and Giresun as well as low-quality hazelnut roots, *çakıldak*, from the highland areas of Aybastı in Ordu. Especially following 2000, within the framework of agricultural liberalization, other product groups were widely affected by the transformation. Prices dramatically decreased and the role of producer cooperatives was dismantled. Due to the hazelnut crises in 2004 and 2005, skyrocketing prices and the straightforward form of the production of hazelnuts make the transition to hazelnuts more attractive for the producers in these regions.

The most recent law, enacted in 2009, replicated the production areas and restriction criteria. Accordingly, the restriction in the areas above 750m is removed. Also, with the Regulation, enacted on October 27, 2009, the following cities and districts were included in the production areas: Center and Kaynaşlı in Düzce; Ferizli and Karapürçek in Sakarya; Kürtün in Gümüşhane. With the latest regulation, enacted on February 24, 2011, the following cities have been included on the list: on February 24, 2011: Hopa and Murgul in Artvin; Doğanyurt in Kastamonu; Kaynarca in Sakarya; Ondokuzmayıs, Tekkeköy, Alaçam, Yakakent, İlkadım, Bafra, Asarcık, Canik, Dikmen in Samsun; Ulus in Bartın. The contradictory developments during the enactment and adjustment of these regulations characterized a strong attempt to change and resist the control on supply. However, the restrictions on hazelnut production were not implemented and the supply could not be controlled.

A Policy Overview of Agricultural Transformation in the 1990s

The ARIP proposal on ASC/ASCUs was implemented through numerous legal adjustments. A study of agricultural policies highlights the fact that the agricultural

transformation was based on a rapid institutional restructuring with a series of liberalization policies. These policy changes, which form the basis of this dissertation, provided a general framework of the changes in the hazelnut market as well as its market making, pricing, production, exchange and everyday life.

In 2000, Law No. 4572 on ASC/ASCUs was launched in order to restructure and transform their roles and functions. A Restructuring Board was created to supervise the streamlining of the UASCs on a voluntary basis. The law proposed that the agricultural cooperatives and unions would become independent, financially autonomous and self-managed entities. The main motive of this restructuring was to create efficient and viable organizations to make them be able to compete in market activities (ARIP, 2002).

From 1964 to 2006, the producer cooperatives, namely Fiskobirlik, were paramount institutions that mediated the relationship between the state and producers. From 2001, they began to operate as institutions to provide services to producers for credits, procurement, pricing and marketing. Each of these activities provided by producer cooperatives was transformed through a variety of laws and regulations that were directly or indirectly related to the roles of the producer organizations.

In local product markets, producer organizations (i.e., Fiskobirlik) became organic entities with a representation of a state institution in a way that gave producers a feeling of security, protection and guarantee. However, the link between producers and producer organizations was dismantled. Furthermore, the role of producer organizations in the local market was been mostly exploited by governments in order to provide incentives for local people during the election times.

Due to unplanned management and populist policies, these organizations encountered financial difficulties, duty losses and administrative deficiencies which made them be perceived as “non-viable” by international institutions (Aydın, 2010).

The transformation of producer organizations in Turkey started in the first decade of the 2000s. The transformation in the hazelnut market was experienced in a different way from the change in tobacco and sugar sector. Laws No. 4733 and No. 4685, enacted on 09 January 2002 and 09 March 2002, respectively, proposed the privatization of the General Management for Trade in Tobacco, Tobacco Products, and Spirits (TEKEL) and the abolition of quota and price support systems to create market conditions through subcontracting production. According to the law, producers would be able to produce tobacco only with firms that had received permission from the Regulatory Committee. Tobacco Law No. 4733, on the privatization of the production of alcoholic spirits, was enacted in order to introduce private auctions to replace the current system of support prices in which TEKEL was the regulator. With the law, the privatization of TEKEL’s production facilities for spirits and tobacco products was enabled by transferring TEKEL’s assets to the Privatization Agency.

The privatization of TEKEL was the result of IMF and World Bank regulations in exchange for political concessions like the privatization of public enterprises, which were mostly conducted by multinational companies and non-political actors constituting a political sphere outside of the central administration. These conditions led to a drastic fall in production volumes due to policies to keep tobacco prices below the increases in input prices and the rate of inflation. Accordingly, TEKEL lost its regulating capacity to set the conditions of tobacco purchases and tobacco

prices (Aydın, 2010).

Regarding sugar production, Sugar Law No. 4634 was passed to enable the privatization of the assets of the Turkish Sugar Factories Corporation, to remove the support pricing system, to allow direct negotiation of prices between factories and growers, to reduce the fiscal costs of the system and to eliminate the Sugar Board and licensing system (ARIP, 2002). The state no longer would set sugar prices, which would from then on be determined by negotiations between private sugar factories and producers.

Although the liberalization of hazelnuts started with the transformation of Fiskobirlik as a financially autonomous entity, Fiskobirlik remained the producer's organization, which purchased hazelnuts as a support mechanism. Despite the fact that Fiskobirlik had given the purchase price on its own, the price had been negotiated with the state. The support mechanism had also been continued with TGB. In 2006, following the decision of an inter-ministerial committee chaired by the Prime Minister, the procurement of hazelnuts was assigned to the TGB.

Following the regulatory changes on ASCUs, in 2003, the debt mechanism was adjusted. Until 2001, the government had subsidized agricultural credit and ACCs through the Ziraat Bank.²⁵ However, in the period of 2000-2002, higher interest rates and low debt carrying capacity resulted in debt delinquency and debt write-offs to farmers, which led to a restructuring of the credit system financed by the Ziraat Bank. Law No. 4876 on the Restructuring Farmers' Debts Law and Agricultural Credit Cooperatives (ACCs) was initiated in order to restructure the credits provided by Ziraat Bank. According to the law, the bank became discharged from providing funds to ACCs with outstanding debts. This led to the elimination of 1,000 ACCs

²⁵ Ziraat Bankası, Agricultural Bank, which is a state bank of Turkey.

from the bank financing (Lundell et al., 2004). In 2005, the law was adjusted with the addition of Law No. 5330, which entailed the elimination of credits institutions operating on the basis of interest.

In 2004, the Agricultural Producer Organizations Law No. 5200 was enacted with the idea to adopt the EU Acquis. The Law proposed the creation of new producer organizations with technical supports for producers such as input support; supports for market access, increasing product efficiency and quality; supply management, and a completed land registry system. These organizations were independent from direct state support and were to be financially autonomous units. In fact, the nature of these institutions was very different from that of Fiskobirlik, which had been the sole producer organization offering the producers substantive returns with 60-years of practice in support purchases. In comparison, as the producer participation in these new institutions is low, these organizations became weak in terms of involving in price and policy making processes.

In 2005, Licensed Warehouses Law No. 5300 was launched to institutionalize the transactions, to register and report contracts to Ministry and the Stock Exchange, to standardize the operations, and, to build an auditing system. In fact, the system of Licensed Warehouses acquired a considerable amount of capital that could only be afforded by large exporters and investors. The system proved unable to replace the social chain between producer-merchant/grocer based on the debt and credit exchange as a constituent of social relations at the local level.²⁶ Again, based on face-to-face interviews, 92 percent of producers have not been informed about the system. Therefore, one might say that the neo-liberal policies were shaped, designed,

²⁶ Licensed Storehouses Law will be analyzed in relation to the competition between formal and informal institutions in the Chapter 4.

discussed and initiated in a way that small producers became detached from the process of agricultural transformation.

In 2005, Law No. 5363 on Agricultural Insurance was passed to create a pool of agricultural insurance administrated by the Ministry, the Secretary of State, the Association of Insurance and Reassurance Companies, the Association of Chambers of Agriculture and administrator of the Pool of Insurance. With the law, the losses of producers might be compensated by a pool composed of several financial sources, like the premiums of insurance companies, state support, credits and other support (MARA, 2008).

Furthermore, in 2005, Law No. 5403 and 5557 on the Soil Protection and Land Use was enacted. This law aimed to protect environmentally fragile areas or those subject to severe erosion and to replace harmful agricultural farm practices with more environmentally friendly ones. It was to be implemented in four pilot provinces, totaling approximately 5,000 hectares: farmers in these areas would be offered annual transition payments (5 to 10 years) of USD 400-900 per hectare (OECD, 2007).

Again, in 2006, Seed Law No. 5553 was enacted to standardize the quality of seeds in accordance with rules of international competition. The law proposed to found the Seed Union for coordination and administration of the seed sector. In 2004, the Agricultural Strategy launched for the period of 2006-2010 aimed to bring agricultural policies into line with those of the EU (SPI, 2004). Therefore, several projects were implemented to harmonize domestic food safety and quality standards with those of the EU. On 12 November 2006, a new Agricultural Quarantine Regulation was published in the *Official Gazette*.

Following these legal adjustments, in May 2010, Law No. 5488 was enacted on supports provided for agricultural enterprises to help them hire agricultural consultants. The persons and institutions that provided consultant services were defined as producer organizations and chambers of agriculture that employed agricultural consultants, agricultural consultancy associations and unions as well as companies, and freelance agricultural consultants. These supports attempt to strengthen the technical aspects of the new model of producer's organizations.

All of these regulations were embodied and outlined by the National Agriculture Strategy (2006-2010) document with the addition of new policies. In 2006, this strategy was enacted with Agriculture Law No. 5488 with a plan to introduce the principles and priorities of agricultural policies that guarantee harmonization through international commitments. The law included a so-called holistic approach to agricultural production and development. As such, it included support instruments that ensured the prevention of any market distortions and the development of producer's organizations.

Also, the law insisted on the increasing significance of the private sector and the active involvement of producers in market activities. Again, the law focused on sustainability, human health, environmental responsibility, decentralization, participation, transparency and accountability. With Agriculture Law No. 5488, the national crop councils were initiated in each product market. On April 5, 2007, the National Hazelnut Council was created. The formulation of crop councils consisting of merchants, industrialists and their organizations, occupational chambers and public research institutions pointed out corporate interests in agriculture to guide agricultural production (Aydın, 2010).

A holistic approach refers to governance concept (as a reference to neo-institutionalism). The governance actors involve the state, farmers, the private sector, and civil society organizations (as agricultural cooperatives, unions, foundations, and voluntary organizations). However, despite the fact that the law referred to non-state organizations and farmers, they were incorporated into the system only in terms of education, consulting, research, and publication or educational materials. The responsibility of civil society organizations (such as product councils, producer organizations) was delimited into technical duty, coordination and partnership with decision-making bodies. Only the state actors involve in the decision-making process.

The overview of these policies provides insight into how agricultural liberalization transforms institutions (i.e., producer organizations) and through which mechanisms this transformation is operationalized (i.e., support system, debt mechanism). The privatization of producer organizations, the changing structure of the debt mechanisms of state banks, the creation of new institutions such as a licensed warehouse and stock exchange are the new and changing elements of hazelnut market that characterize the globalization process with new concepts such as “global,” “technical,” “international,” and “competitive.” All of these legal and regulatory changes generate new politics in market making processes. These new forms of organization in agriculture which create uncertainties; and the areas of politics which make up the research units of this dissertation.

Conclusion

Especially since the 1980s, Turkey adopted liberalization policies following severe economic crises that resulted in a dramatic downturn. The recovery of the damages dramatically affected the agricultural sector through legal and regulatory changes. This chapter provided an overview of these changes in order to provide a general framework of the dynamics of the agricultural transformation in the hazelnut market.

The dissertation identifies neo-liberalism as a process that is initiated by reform policies to transform the product markets. It is a dynamic and never-ending process that includes diversities and contradictions. The power and interests of these groups shape the process in a different way in different product markets. Through socio-technical controversies among these groups at the local level, the implementation of the neoliberal policies has become contested and controversial.

This chapter started with the discussion of agricultural transformation with insight into the ARIP, which is characterized as a globalization project adopted to recover the impacts of the economic crises. The policies initiated by the WTO, the OECD, and the World Bank as well as the EU have been derived recently from the decoupling concept to disengage the support program from production decisions without distorting trade or production. Turkey has become fully involved in the WTO requirements through direct supports with the aim to eliminate trade, production and thus market distortions.

The neo-liberal policies, which aim to enable globalization, disabled state actions and thus create a gap between individual and state through *ambiguous sovereignty* (Pauly, 2003; Pauly and Grande, 2005; Parkinson, 2003). Therefore, the

neo-liberal market reform policies initiated by the international institutions are required to be examined in terms of the implementation by the local market forces. For instance, the focus of the legal adjustments in the hazelnut market started with the Law enacted in 1983 on the limitation of hazelnut cultivation areas. However, from 1983 to current, the restriction did not find a place to be executed as planned. Moreover, for instance, the local market forces do not accept the constitution of commodity exchanges. I concluded that the market rationale of neo-liberalism is incompatible with the local market setting. The liberalization process in the hazelnut market did not feature the elements that neo-liberalism envisaged.

The chapter revealed that the process of globalization has materialized through a series of institutional changes comprised of uncertainty. The market crisis occurred not only as a result of the reform policies, but also the controversies between the market groups and their controversial interaction. *Unplanned planning* creates uncertainties and overflows (i.e., instability, distortions, market crisis) due to a number of reasons.

First, the liberalization policies restructure institutional environment and reconfigure the relationships among the market agents. The state has played the role to create and preserve the institutional framework appropriate to reform policies (Harvey, 2005, p. 2). However, not all of the tools of state intervention have the sole autonomy to shape the liberalization process. The state intervention continued with the involvement of TGB. The interaction between the state and the power of local forces need to be analyzed in relation to one another. The dynamics of the state intervention in the hazelnut market were related to the local power dynamics, which analyzed in the following chapters.

Diversity and the politics of diversity have become the center of productive uncertainty to enrich dialogism (Callon, et al. 2009). However, the transformation has become uneven between the product groups and regions within a country. It is the main aspect of the hazelnut market that implements the liberalization process in a more contested and contradictory way. The process involves the multi-tasking functions of multiple actors in a multi-level course of action. In other words, the mixture of public and private actors as well as interest and pressure groups has moved toward an intense political bargaining with and between each other, which results in mutual concessions and compromises. However, the exclusion of laypersons and ordinary citizens delimits the political institutions to overcome uncertainties (Callon, et al. 2009).

Second, the involvement and lobbying power of multinational actors in other product groups (i.e. tobacco and sugar markets) created a rapid transformation of these markets. Neo-liberalism in a local market setting might be related to the path-dependency (Hall and Soskice, 2001); the impacts of the transnational actor on the regional governments (Apeldoorn, 2001). However, in the hazelnut market, the local power dynamics (i.e. Chamber of Agriculture, Fiskobirlik) and the lack of multinational companies have endured the presence of the regulatory agency as price setting power and state support. The hazelnut market does not feature a direct engagement of the transnational actor in the decision-making mechanism. The market is constituted by means of informal relations – among the local actors as well as between the local and global actors – that prevent the involvement of the transnational actor in the policy making.

Third, the lack of local support and long term focus has resulted in the

problematic adoption or implementation of the laws and regulations. The farmer transition to alternative products and DIS systems has been complicated and problematic. Beside the economic value of hazelnut product, the hazelnut tree itself is embedded in the locality in the region. The loyalty to hazelnut production also is related to the producer's resistance to alternative product projects.

Therefore, the execution of the ARIP, following a set of policy enactments, was analyzed for its significant impacts on the locality. The technical reform packages introduced by international institutions disregard the local life in implementation and the impacts of these reforms on the local people. The locality creates the conflicts and controversies against the liberalization policies.

Fourth, the agricultural transformation focuses on support systems and producer organizations, which were restructuring by eliminating their ability to influence market price. In the past, producer organizations have become partner of producers in the processes of production and exchange by acting as the intermediary between state and producer. As these organizations have become privatized and autonomous, their intermediary role has been redefined through the core market concepts to create "efficient" and "effective" institutions. Since the excess supply has become the significant factor, the diminishing role of Fiskobirlik as the regulatory agency of the market has made the hazelnut market contradictory in the contested process of supply control. The reform policies on agricultural supports have become more critical in terms of excess supply and its control. The intervention of this control process generates bargaining and negotiations as well as uncertainties.

The transformation of producer cooperatives has become a lively research site that allows the observation of the liberalization process in agriculture. With new

policies, these institutions have undertaken new aspects of technical and consultant roles throughout the production process rather than the process of pricing and policy making. The removal of Fiskobirlik from price-making processes has also resulted in its isolation from the market dynamics. Since Fiskobirlik represent producers, its withdrawal has also led to the isolation of producers from not only exchange, but also even from production processes (i.e. uprooting of hazelnut trees, out-migration).

Fifth, since the 1980s, these legal restrictions have not been implemented on the ground during the process of the politicization of hazelnut production. Although it is argued that agricultural supports distort product markets in terms of market price effects, it is the uncertainty in policy implementation that creates market distortions. Therefore, it might be the points of reference of so-called market perfectionists require coping with first. Producers may confront uncertainty in terms of the implementation of support programs. This is also inconsistent with the minimal state principle of the neoliberal discourse.

In light of these discussions, I conclude that the agricultural transformation consists of uncertainties such as change, ambiguity and diversity, and that insight into the market reforms requires an understanding of the market agents and their interactions. This chapter provided an overview of this transformation which will be examined in the following chapters by probing its dynamics, contradictions and struggles.

CHAPTER 3

PRODUCTION AND CALCULATION OF HAZELNUTS

On the night of Sunday, 5 April 2004, the hazelnut orchards along the Black Sea coast were hit by a snap frost. The buds died on the branches; in the following weeks, most of them fell to the ground. Although April is usually the riskiest period for hazelnuts, the March frost in 2004 resulted in a series of dramatic crises in the hazelnut market.²⁷

The frozen hazelnuts of the new season in 2004 influenced the dynamics of production, calculation, pricing and exchange. The hazelnut market entered into a crisis so deep that its impacts can still be observed through the debt positions of producers, the bankruptcies of small producers and merchants, the exchange relations between market agents, and the pricing strategies of exporters.²⁸ The speculations on the production level and prices collapsed and created a huge panic.

This section provides an in-depth analysis on the dynamics of the hazelnut market with a specific focus on production conditions on the ground as well as calculative mechanisms. The chapter focuses on two steps in the market process, production and calculation. Each of these market-making processes has become a significant research area to understand how the process of material things becoming

²⁷ As a local expression, this event is known as the “The Hazelnut’s April 5th” (Fındığın 5 Nisanı) as a reference to the 5 April Economic Decisions, which introduced austerity measures during the severe economic crisis of the same year. In 1994, the Turkish economy confronted severe current account deficit and macroeconomic instabilities. The April 5 Decisions initiated economic measures to overcome the entry of speculative capital and to lighten the impacts of the economic crisis. The 1994 economic crisis resulted in wage decreases, increases in unemployment, devaluation and inflation.

²⁸ Also, at the risky time in the market, the forward prices have been formed and any problems during the fertilization might lead to the changes in the crop level, so as to the spot prices. These dynamics will be examined in the Chapter 5.

goods is enabled by the agencies to form expectations and to undertake calculations (Çalışkan and Callon, 2009b).

First, this chapter explains the production conditions of hazelnut by focusing on the hazelnuts themselves, the conditions of producers, and the costs of production and seasonal workers. The chapter provides a quick outlook on the nature of hazelnut with the introduction of its climatic conditions and life cycle as well as cultivation. Such an overview depicts how fragile the nature of hazelnut is and how this fragility contributes to the contested market making and market instability. The insight into the production process includes an understanding on the harvesting conditions, the cost items, the changes in the production conditions and the diversity of the production on the ground. The analysis of hazelnut production also signifies how producers interact with the plant of hazelnut and how this interaction creates associated formal (i.e., producer organizations) and informal (i.e., debt relations with merchants) institutions.

Second, this chapter includes an analysis on the calculative mechanisms and politics of calculation. On the ground, the processes of calculation, estimations, forecasting, and planning of hazelnuts are the constituting yet at the same time contested encounters of the market making. Focusing on calculations, this section probes the processes of calculation, projections, estimations and measurement, by observing how the market construction process, during which counting and calculating emerge, is created and how calculative agents produce numbers.

Calculative agencies are included in the literature on market construction (Beunza and Stark, 2004; Callon, 1998; Callon and Muniesa, 2005; MacKenzie, 2006) through which these agents appeared due to the necessity of addressing

uncertainties in the local market. However, the literature includes little about how calculative agencies generate uncertainties through processes and interactions among agents and between their identities. By indicating the central role of calculative tools and devices, this chapter argues that these tools and devices are produced by market agents in their making and functioning of markets. In light of the overview, this chapter aims to uncover processes in which the market is constructed through numbers and perceptions by introducing the hazelnut itself, its production and calculation as how the market agents produce goods and expectations and calculations.

Production of Hazelnuts

Hazelnuts grow on two types of tree structure, the shrub and the single trunk. In Turkey, the trees generally grow to a height of 3-4 meters and have the appearance of shrubs, while in some European countries, in the United States (Mehlenbacher, 1991) and in small parts of Turkey they may reach four to six meters as a single trunked-tree. Cultivators, who prefer the single trunk tree, aim to acquire more efficiency. Those who prefer the shrub aim to obtain both more efficiency and quality.²⁹ Nuts are produced six to seven years after planting. They do not require daily care.

²⁹ The system of single trunk structure was pioneered by M.Ş. who produced hazelnut with a single branch system. He works with approximately around 50-60 producers (in 2009) within the framework of a union that is involved in single branch production. In the single branch system, as different from shrub [*ocak*] system, which was traditional in the country, the hazelnut tree was pruned to grow over a single root. By this means, efficiency and productivity were increased. M.Ş. was the founder and leader of the Keşap Hazelnut Producer Organization. He also works on Good Agricultural Practices, that is, certified standards, which required continuous audit and control during production process. During the field study, I worked with M.Ş. in various spheres, such as calculating (hazelnuts) and communicating with producers.

Instead, periodic attention is required for fertilization, herbicide and pesticide treatments.

Like other agricultural products, the hazelnut also needs climatic conditions suited for optimal growth and efficient cultivation. It requires winter temperatures higher than 8°C, and summer temperatures lower than 36-37°C. Hence, the average annual temperature should be around 13-16°C with 60 percent of relative humidity in June and July. Also, since an even temperature in winter is a major factor in production, the trees need more than 755mm of regular precipitation throughout the year.

In its deep dormant stage, the hazelnut can survive in temperatures as low as -25°C and -30°C. After the dormant stage, it may be frozen and severely damaged at temperatures lower than -20°C. The injury begins at -4°C at bud burst stage and significantly worsens at -6°C. The most risky period for the hazelnut in relation to the frost is the end of March due to its sensitive nature (Çakırmelikoğlu and Çalışkan, 1991[1999]).

The harvest period takes place in August and September, depending on weather conditions. The nuts are harvested by hand from the branches shaking the branches and picking the nuts up off the ground. The nuts usually are dried in their husks (*çotanak*) on compacted soil or on concrete surfaces under the sun. A few producers set up tents over their hazelnuts. After drying, the nut is separated from its husk by haymaker and then sent to plants for shelling and processing.

The Costs of Hazelnut Production

Although production conditions vary for each producer, this section provides the cost items of hazelnut production. The general cost items mentioned by individual producers varied depending on the size and position of land, the socio-economic conditions of producers, their family structure and general perception of agricultural production. The analysis of production costs was helpful to understand production relations and the struggle against the uncertainties and contingencies in production. I tried to understand production processes, costs and the change in these processes by conducting interviews and participant observations with producers.

Considering the characteristics of the hazelnut market, it would have been impossible to understand the reflections of diversity by visiting or staying in a single village. The hazelnut region covers a large area reaching from west to the east of the Black Sea region. Even if Ordu and Giresun are set aside as original hazelnut cultivating areas, the entire region is dominated by a diversity that can be observed in every single city, every single town, and even every single village. This diversity is the result of each region's geographic structure, the socio-economic status of producers, their ownership status, production conditions, and their relation to the local market as well as the formal and informal institutions. On the ground, I aimed to reach producers of different socio-economic background and with different production conditions in diverse villages with the aim to understand the range of experience. Over six months, I studied this diversity, reaching producers from the east to the west.

The hazelnut is a garden plant that requires care during certain months of the

year. Not every producer adopts a professional approach in fertilization and pesticide applications as part of the plant's maintenance. Fertilization and pesticide application are carried out mainly by ignorant, hearsay and non-systematic methods. Considering the eastern Black Sea region approximately 8-10 decares (1,000 meter square) per house is the average size. However, the number of area size rose from 30 to 80 decares toward the central Black Sea region.

The hazelnut tree, like any other agricultural product, requires fertilization. Producers may obtain fertilizer at lower prices by means of state aid via their chambers of agriculture. However, they also have the opportunity to buy fertilizer from merchants in exchange for hazelnut. The price for a sack of fertilizer ranges from 25 TL to 27 TL (for approximately 25 decares). Also, labor costs incurred for fertilization constitute another cost item.

Beside fertilization, pesticides are applied twice a year under ideal conditions. It is not possible for all producers to apply pesticides. The small producers cannot regularly apply the pesticide treatment. Small producers cannot afford to apply pesticide due to their low amount of hazelnut earnings. The cost of pesticides is indicated as 400 TL (150 TL twice a year, plus 100 TL for labor costs) for 25 decares.

Just before the crop season, hazelnut orchards are prepared for picking. Any weeds growing among the trees need are cleared. Producers for whom hazelnut is a primary – and often the only – source of living, continuously care for their gardens and show the utmost attention to their maintenance. Producers who do not make continuous maintenance usually live far from their villages, hazelnut production is not their main means of subsistence, or they lack the necessary financial resources.

These indicators are associated with the fact that hazelnut cultivation is considered as a secondary source of living. The major differences can be observed between well-kept gardens and seemingly abandoned gardens during the period prior to harvest.

At this point, the origin of the expression *touristic farming* became clear to me. This term is used in a pejorative way for producers for whom hazelnut is not their primary source of income. Occasionally, the expression *touristic farming* also is used in a pejorative way to show disdain for producers. Business groups use this expression widely. The general perception of the market is that the primary duty of producers is not farming. The reasons of this perception lies in the fact that producers do not live in their villages throughout the year, that their primary living source is not farming, and that hazelnut production does not require daily care. This is the reason why, during my interviews with producers, I asked them questions on their business status, their profession as well as how they positioned themselves in occupations such as civil servant, worker or farmer.

For those who define themselves as farmers, hazelnut production is their primary and only source of living. Those who did not define themselves as farmers reported that they were public officers, pensioners, or tradesmen. A producer, for instance, advised me to get information from one of his relatives, who spent the winter in the region and lived in the city center near the garden, and explained: “There are no hazelnuts. I can’t harvest them. They won’t meet the labor cost. I have told Durmuş (his nephew). He will do the harvesting. Ours has been really a touristic visit.”

The concept of *touristic farmer* is also used by the producers associations. Producers association that recently established within the framework of EU law uses

the term “touristic farmer” for others to put their members at the forefront and to distinguish themselves from other producers. This concept also is used to refer to producers as a reaction to *lazy* or *ignorant* producers, who do not “protect” their cooperatives.

A provincial Fiskobirlik directorate described the members of the hazelnut cooperative managed by it as follows:

There are 200 creditors payees in my cooperative with total receivables of 6.5 trillion. Where are these people? Citizens have drifted away from cooperative mentality. This is because they understand that they won't reach their goals. That's a kind of touristic farming. Hazelnut has never been a primary source of living. Producers are permanent employees, pensioners, or tradesmen. Only 10 percent can be called primary (Appendix, 1).

Even though these statements may have seemed to be an emotional and reactive approach during the first stage of the field study, the statements took a more meaningful shape in later phases of the fieldwork. The touristic farming approach emerged as a significant aspect which, among others, had an effect on costs.³⁰ In cases where producers hire external workers for each production stage, their profit decreases. A producer has explained the situation in the following words: “If I stay in the village and take care of everything myself, I sell hazelnuts at 5 TL [*a good price*], but I am not engaged in production. I'm one of those lazy people who hire workers, too.”

There were many cases in which the hazelnut orchards are located far from the producer's house or even on a slope opposite the village or at the piedmont of a

³⁰ The seasonal workers are hired for the picking purposes. Therefore, the cost of picking constitutes the large portion of the hazelnut production. This will be detailed in the section of seasonal workers.

slope. The orchards spread to large areas where there is a far distance between gardens and places whereby producers dry and lay their hazelnuts.

Although everybody – men and women – works together to pick the hazelnuts, one women producer said, “The men go into the orchards if they are here in the crop season, as the vast majority of them work in other jobs. We stay at home. The garden is too far and it’s too hot in the summer.”

Between the gardens and these places, which are usually next to houses, the hazelnuts are transported with different vehicles depending on the terrain. In certain places, the hazelnuts are carried from the orchard to the roadside via horse or donkey, manpower, or *patpats* (a kind of agricultural motor vehicle). While transportation is carried out by donkey or patpats on the steep lands of Ordu and Giresun, it is possible to access the orchards by tractors in the low, flat lands of the central Black Sea region. Therefore, another cost item emerges as labor costs for carrying hazelnuts up to or down from the roof on which some producers spread out their hazelnuts.

Subsequent to the picking work, hazelnuts are laid on broad areas to dry (Fig. 4 and 5). Some producers erect canvas shades to protect their hazelnut from precipitation. Yet, most producers dry their hazelnuts in open areas. For protection against rain, rubber sheets are spread under and above the hazelnuts spread out in garden. Nevertheless, it is not possible to completely avoid the effects of rain and flood waters, considering the frequent rainfall in the region.



Fig 4: Hazelnut Threshing.

Source: Ebru Tekin, 2009.



Fig. 5: Hazelnut Threshing.

Source: Ebru Tekin, 2009.

Hazelnuts are aerated by means of rakes to protect them against wetness and moisture. This is also important for the protection of the hazelnuts' quality (yield), as the moist hazelnuts are refused during selling (by TGB between 2006 and 2009) or its yield price decreases. Moreover, toxication, which results from humidity, leads to an increase in aflatoxin level, which is acknowledged as an important criterion for measurements during the export of the product.

A short glimpse at production processes reveals that there is a lack of infrastructure to control the level of humidity and to control aflatoxin levels. Producers in villages at altitude of 600m and above have to come to the city center, as their hazelnut will not dry under the village's very steep and humid circumstances. In these villages, producers spread their hazelnuts on the pavements at the city center to dry. For producers, it is important to dry their hazelnut in the shortest period of time in order to prevent decreasing hazelnut's quality and in-fill quantity (yield) and also to turn their products into cash.

Producers sell hazelnuts as uncrushed, so during the drying process, they clean the hazelnuts by hand from the small fries of each hazelnut. A separating machine called a haymaker is used to separate hazelnuts from brushwood after drying. The drier the hazelnut is, the easier it is to process it with haymaker. It is important to dry the hazelnuts well enough to avoid any product loss, as humid hazelnuts are more likely to get stuck in the haymaker. In the past, producers separated hazelnuts from brushwood by hand. Although some producers believe that the use of haymaker might lead to the cracking of the hazelnut mantle, all of the producers use them. After the hazelnuts are processed with in this way, they are ready to go to market. Producers are paid approximately 90-100 TL – in 2009 – per hour of haymaker

operation.

The haymakers are very noisy during operation and scatter particles when ejecting waste materials into the air which can fly into the face of anyone nearby. Once I tried to interview several producers during the operation of one of these machines. The particles rained down on us and we could hardly hear each other due to the noise. This was a source of disturbance for me, yet to the producers, it meant that the hazelnuts were almost ready to bring to market.

After being separated by the haymaker, the hazelnuts are put into sacks to take to market. The producers bring their hazelnuts to the market by themselves, although in certain cases, merchants come to villages to pick up the hazelnuts. In the latter case, the producer owes these merchants.

Another cost aspect of hazelnut production includes fees to the institutions that issue certificates. The Provincial Directorate of Agriculture receives 10 TL; and the Chambers of Agriculture receive the membership fee depending on the size of the orchard. The matter of these fees is a sore point for producers, who claim they receive no benefit in return.

Considering the production costs, my interviews revealed that the producer debts to merchants, tradesmen, banks, or friends/acquaintances from previous years also have an impact on the diminishing return of production. In light of the in-depth interviews, it was revealed that almost 75 percent of producers' earnings are paid to discharge their debts. Even producers with fixed income are indebted to the merchant as crop season nears. Since producers cannot not sell their hazelnuts immediately (due to the processes of picking, drying, and sorting), they have to borrow money. Especially, in the cases of money borrowed from merchants, the hazelnut earnings of

producers – in particular small-scale producers – become insufficient to support living for the entire year, as they had bring their hazelnuts to the merchant in return for the borrowed money.

The Picking of Hazelnuts and Seasonal Workers

Different picking dates are announced depending on the altitude of an area to prevent the hazelnuts from being harvested too early and to prevent a possible over-accumulation in the market. In 2009, the harvest time was set as 7 August for the coastal districts, while the beginning of harvest was determined as 12 and 18 August for the central and highland regions, respectively. Yet, nobody complies with the harvesting dates announced by the Provincial Directorate of Agriculture.

Picking constitutes the largest cost item in hazelnut production as it requires a large labor force. It is carried out either by *imece* (cooperation among villagers) or by hiring workers employed from highland villages. Also, family members living in other cities come to their villages during the crop season to help for picking. In the past, it was possible to complete the work with *imece*. However, in recent years, the number of people willing to do collective picking has decreased. Following the splitting of families, out-migration, and the commodification of the hazelnut, *imece* has been replaced by cheap labor from east and southeast Anatolia, especially since the 2000s. Producers, who did not participate in *imece* or whose family members are low in numbers, have to hire workers for picking. Even though the number of employed workers differs depending on the size of the hazelnut area, the majority of producers hire workers.

Considering the cost of hiring workers, business groups criticize the inclusion of labor costs in hazelnut production costs. According to these groups, a “real farmer should harvest his product on his own.” Apart from discussions on labor and production costs, this section focuses on the conditions and circumstances of production, and on the working conditions of such workers, rather than trying to provide an answer to the discussion of whether it is necessary or not to employ pickers. Hence, it is a major concern of this dissertation to keep a complete outsider perspective even by deconstructing the common and taken for granted arguments with no concern to provide a definition of farming.

The demand for seasonal workers usually comes from Ordu due to the number of hazelnut orchards. The per diems of local workers coming from the underdeveloped highland villages of the Black Sea region are higher than those of workers coming from east or southeast Anatolia or from Georgia. The Georgians work for cheaper per diems, as they enter the country on tourist visas and work illegally. All workers from outside of the hazelnut region are referred to as *yabancı* (foreigners). The low amount of the daily wages paid to these workers is associated not only with their “foreignness,” but also with the fact that they are not real hazelnut pickers who have to work even for low wages.

The seasonal workers arrive with their belongings and pitch their tents in the areas determined by the governorate, and stay there until the end of harvest. The gendarmerie stops anyone who tries to pitch a tent outside of the permitted areas. The gendarmerie also keeps guard in the area.

In 2009, the Governorate of Ordu declared that Kurdish seasonal workers would be permitted to pitch their tents only at pre-determined locations on the banks

of the river, removed from the city, a tactic to render them invisible. In the same year, the Black Sea region – a region with high precipitation – suffered many floods, one after another, which destroyed houses and cost the lives of many people living along or in previously dry streambeds. For that reason, the placement of the workers on a riverbank can be considered to have been a decision to ignore the possible consequences of the floods.³¹

The permit issued to these workers to live on the riverbank was associated with the desire to keep them out of sight. The producers in need of seasonal workers could come to these secluded zones and select the number of workers they needed, and take them to their hazelnut orchards for the required number of days.

Producers may contact a *çavuşbaşı*, or foreman, directly. Foremen are intermediaries, who may be a relative of workers or just persons engaged in the business of intermediary. Close to harvest time, the foreman contacts the producers whom his people worked in previous years to confirm the conditions of hiring such as time, number of workers, per diems, accommodations and meals. In some cases, the travel costs of the workers are covered by producers. During these conversations and bargaining, trust relationships are weak between foreman and producer; and between producer and workers. One producer, expressing that he is suspicious when the workers speak in Kurdish among themselves, said, “I don’t know if they’re saying something good or bad; I can’t make out whether they really think what they say.”

The trust relationships are also fragile between the workers and the foreman. Sometimes, workers are unable to receive the salaries foreman agreed to pay them.

³¹ This is a kind of hostility against the Kurdish seasonal workers who are from different cultural and ethnic backgrounds. The term hostility in that sense is argued by Dustmann and Preston (2004: 3).

Producers pay 10 percent of the total wages to foreman. Yet, this ratio is subject to change. Producers might bargain directly with workers to exclude the foreman so that they will not have to pay a commission fee to a foreman. However, in that case, since the foreman does not wish to lose his control, he immediately steps in to protect his commission. At this point, the protection of personal interest gains prevalence.³²

In cases where workers are accommodated in places the producers have allocated for them, workers and producers are in close relations to each other. Many producers convey an insulting attitude towards the workers who come from east or southeast Anatolia. One of the big producers whom I interviewed condescendingly pointed to an old, abandoned country house when I asked him where workers were going to stay. Clearly nobody had lived in that house for years. “They’re going to live there; yet, I still haven’t done last year’s laundry. They were so dirty. The workers from the previous year were so good. We want them again but the foreman says that they are working at other jobs; hence, he can’t reach these workers.” The producers who provide accommodation for workers mostly put them in run-down houses, called workers’ houses, close to their own houses. The producer may also hire the same group of workers and share the costs of their accommodation. In that case, the producers pay a daily rent of around 20 TL to the owner of the workers’ house (Fig. 6).

³² For more detailed information on seasonal hazelnut workers, see also Küçükırca (2012).



Fig. 6: A house under renovation and an abandoned house.

Source: Ebru Tekin, 2009.

For the last ten years, the chamber of agriculture of Ordu has been working with a person of Kurdish origin, called A., who was assigned the duty of recruiting seasonal workers before harvest time. The contact with seasonal workers is conducted through a foreman. At the time toward harvest, the Chamber of Agriculture asks the producers to declare the number of workers they need for harvest. On the basis of the demand coming from the producers, A. contact foreman in east and south-east Anatolia and notifies them of the number of workers needed for harvest to ensure that a sufficient number of workers are available during harvest. This pre-contact system is meant to plan and control the arrival of the workers and to prevent an excessive number of workers coming to the city.

When I met a producer, whom I contacted through the mediation of the

Chamber of Agriculture, he explained the cost items as follows:

17 people have come. One cooks, who receive salaries 1.5 (50 percent more); 1 sacker, at 1.5 of daily diem (50 percent more); and 1 team leader at double wage. Picking is carried out by 14 people. It was finished in 13 days. We harvested 5-6mt; it was 1.5mt last year. I spent 16,000 TL for 60 decares; I have 2 sisters to share this cost. We spent 4,500 TL for the workers, and 2,500 TL for (5.5mt of) fertilizer. I completed cleaning the orchard by myself in 27 days. If I had employed workers for that it would have cost me $130 \times 27 = 3,500$ TL. And there is also the cost of haymaker, transport, etc., to be added (Appendix, 2).

Afterwards, we went to the orchard to talk with the workers. We travelled by car and arrived five minutes, parking the car near the orchard. The voices of the workers could be heard. In the hazelnut market, the picking works in the shade of the trees is a social job both for the producers and workers. Since the job takes all day and is exhausting, the groups talk, laugh, and sometimes sing together.

The producers may control the picking workers from time to time and also admonish them to work faster. As we walked through the orchard, I could see workers among the thick hazelnut trees on the steep slope. I began to talk with each of them. The worker group consisted of men and women young and old. S. K., born in 1972, a male, came from Ergani, Diyarbakır, in Southeast Turkey. He was self-employed and said, “Previously, we went to pick hazelnuts; we have been coming to this region for ten years.” He told me that they stayed 25 days a year. They come to Ordu in fifteen hours with twenty-five people in a Ford Transit, which has a maximum capacity of fifteen. The journey cost between 800 and 900 TL. He added that they had 40 hectares of wheat, lentil, and barley fields in Diyarbakır; yet only six to seven hectares fell per person, considering that there were fifteen family members. Thus, they earned 1,000-2,000 TL, annually. More importantly, they had no social

security, which they could have had with a permanent job and they were in a constant struggle to find temporary work.

The so-called “*dayıbaşı*”³³ interfered without bothering about the producer:³⁴

As announced by the governor, 23 TL goes to us, and 40 TL goes to local workers. They pay us less because we come from the east. They regard us as the enemy. Previously, the wages [*for picked hazelnuts*] were paid per kilogram. This changed two or three years ago. The workers filled the sacks with soil and stones. We are able to take a bath every 15 days and we stay 15 people in one room. Since 4-5 years, we came with the intermediary of the Chamber of Agriculture. Then I said to myself: now it’s your turn to earn some money. This time I came with a minibus ... We eat only noodles [*the landlord attempts to object, but they smile by confirming*] (Appendix, 3).

Ö.B. was born in 1984, but said that 1987 was written on his identity card. He came from the village of Çardak in Şirvan. He worked as a porter with uncertain earnings. He had come for to pick hazelnuts for the last three to four years. He said that he was building a new house and was in need of cash. Meanwhile, the *dayıbaşı* called out to the others: “You don’t tie the sack well... Lots of hazelnuts remain on the ground!”

S.B. was an 18-year-old female worker who was the niece of the *dayıbaşı*. She was working as a hazelnut picker until the announcement of the university exam results so she would be able to finance her educational costs. B.K. was born in 1982 and graduated from professional college. He was a relative of the *dayıbaşı*. “We loaf around,” he said, and added, “Five years ago, hazelnuts used to be sold for 7 TL;

³³ There are two types of people who coordinate and manage seasonal workers. These are called *çavuşbaşı* (foreman) and *dayıbaşı*. Although these definitions are used interchangeably among the local people, there are differences. A *çavuşbaşı* is a person who heads and manages workers and coordinates their communication with the *dayıbaşı*. A *çavuşbaşı* also engages in the preparation of tents, the supply of meals, water and all infrastructures. A *dayıbaşı* is an intermediary between the *çavuşbaşı* and the producers. During the employment and coordination process between the seasonal workers and the hazelnut producers, a *dayıbaşı* may not be involved and the communication between *çavuşbaşı*, workers and producers. In some cases, there might be both a *çavuşbaşı* and a *dayıbaşı* in this communication. In this case, the per diems of workers are retained (Küçükırca, 2012).

³⁴ Based on my notes of in-depth interviews.

now it's 2 TL. Hazelnuts have a shared destiny with our products in Diyarbakır.” The similarity was related to the agricultural reforms in the southeast region. With the quota imposed on tobacco production, and due to drought, production had decreased and producers had become deterritorialized.

After the completion of the picking work, the workers went to other orchards or returned home. The producers usually borrowed money from the merchant so they could make cash payment to their workers. The per diems of picking workers need to be paid immediately to the workers, who are in need of money to return home. Yet, there were also times, in which producers had to give hazelnut instead of money if they failed to pay the workers' wages.

Web of Networks: *Reaching the Producers*

During my field study, I reached the producers through a network that I had established via various channels. At first, I planned to determine a few villages through friends and acquaintances and wanted to stay in those villages for a long period of time. My intention was to handle those villages as sample villages, yet the nature of diversity immediately revealed that this would be inadequate to examine the diversity. To overcome this problem, I had to reach different people from different locations. Within each network, producers are similar to each other; therefore, I had to expand diversity more and more. I believe that I accomplished a fair sampling of this diversity as a result of my field study.

The chambers of agriculture, my personal contacts, and producers' unions were the links that had helped me in reaching producers. I conducted in-depth interviews

with 150 producers. Meanwhile, I had the opportunity to get acquainted with and talk to hundreds of other producers coming from different villages, different socio-economic background and traditions, different points of view, different living conditions, and different production and exchange processes. Even though my personal efforts to reach producers directly made it possible for these people to share their daily lives with me, I was reliant on the intermediation of other people and institutions in order to reach the big producers. There were also times when I reached producers by introducing myself while they were waiting for their harvest on the pavements at the city centers. To see the sincerity of these people relied also on another of their characteristics, which provided a huge convenience for my field studies: They loved to talk about their experiences and problems. Along with these characteristics, it has to be pointed out that they had trust and acquaintance [*tanış*] oriented concerns. The intermediation that I used to reach producers required deep trust in me and a sincere statement of previous experiences.

I understood that the producers that I met via institutions accepted the requests of institutional officials to meet me as a sign of respect. I interviewed them not in the institution, but in quiet, distant places. My aim was to help them share their views in comfort. This network was comprised of village headmen, chambers of agriculture, producer organizations, my personal contacts, and contacts derived thereof.

I carried out interviews in all of the hazelnut areas of the Black Sea region beginning from mid-July until December. I reached 63 villages and 150 producers in person and made in-depth interviews. Together with the families and neighbors of 150 producers, I interviewed individually or in groups. With the help of two hazelnut families, whom I had met in 2006 and kept in contact with until 2009, I found the

opportunity to compare and understand the changes in the market. Since I started my interviews with producers in 2009 right after the publication of the Hazelnut Strategy, the conversations developed around this topic and took further shape on its effects on producers. However, what I actually wanted to learn was the place in which the producers positioned themselves with respect to market making processes and the processes of uncertainty created by institutions; and to what extent they actively involved in these processes. In light of these observations, the producers might be analyzed in terms of and the dependence of producers on the hazelnut production.

The channels that I employed to reach producers also included village headmen. The village headmen are important in terms of their relations with the villagers. The villagers may consult the village headman in terms of production,³⁵ debt position,³⁶ information and communication.³⁷ I was able to complete the interviews, which I carried out in one of the central villages of Giresun, through the village headmen. The village headman's office was in the provincial center. Although Giresun is a rather small city compared to other Black Sea cities, its educational level is quite high. The village headman talked of the changes experienced in the market in the last years. To describe the size of his village, he said that the village had a settled population of 1200 people, a kindergarten, a primary

³⁵ In the village in the central Black Sea region, the initiator of the organic hazelnut production was the village headman. He had the role of linking the producers with the certification company. During the production process, the headman was advised to make suggestions in terms of production conditions, certification criteria and the general communication with the certification company.

³⁶ Banks contacted the village headmen to reach the producers. In some cases, the village headmen might be the guarantor of the producers in order for the producers to be eligible to acquire bank financing.

³⁷ The producers receive general information about the market, changes and policies. The villagers create a long-term relationship with the headmen. In some villages, the headmen are elected in subsequent election periods. If he or she is unable to be re-elected, due to the quote on the number of election terms, his/her relatives are nominated as candidates. I met some of the headmen who had been reluctant to be re-elected, yet the villagers had convinced him or her to run again.

school, and three mosques. He did not forget to mention that the village was big and central and, therefore, faced no difficulties such as blocked roads, which was a frequent difficulty faced with regard to mountainous village roads, although it had a dispersed settlement layout. He told me that the village's population increased in summer months with the arrival of villagers living in other cities or foreign countries.

During our conversation, he had a continuous stream of visitors. The residents of the village visited his office when they came to town, drank tea and conversed with him. Even though the villages are distributed over a wide area, the villagers living or working in town all knew each other. After a woman asking for the address of the Chamber of Agriculture left his office, the village headman explained to me that she worked in the social service department.

As I asked the village headman his opinion about the Hazelnut Strategy, he answered as follows:

It's a belated decision. These limitations haven't been brought for 15 years. Production increases, prices fall. They have left it to free market in line with the EU. Sales can be made at 3-3.5 TL. With support, 4-4.5 TL will be possible. Yet, what will happen when there is an abundance of hazelnuts? It's a correct decision for Giresun-Trabzon-Ordu, but not for the time being (Appendix, 4).

He noted that the decision would provide for product-based supports instead of area-based supports, and added that product-based supports might be open to fraud by saying "we love to make fraudulent sales; so they might sell hazelnuts from Akçakoca³⁸ as if they were here." His answer to my question about price estimations was as follows:

³⁸ Akçakoca is a hazelnut producing district located in the western Black Sea region. It is common to hear comparisons of the high quality of Giresun hazelnuts with the low quality of those of Akçakoca.

462,000mt of harvest is estimated for the products of 2009. The price might be 3-3.5 TL this year. But what if the harvest is as last year? There's nothing that we can know for sure. Everybody is confused, thinks of the price to be offered by the merchant. What if he says 1 TL in this free market? Wages have been set as 23 TL by the governorate of Ordu. But nobody will work for a wage under 30 TL per diem (Appendix, 5).

Subsequent to our conversation, the village headman introduced me to a man named Mr. Mustafa, who was to accompany me to the village. I learn that the village headman had arranged a car for our journey to the village. We left the village headman and headed towards the village. Mr. Mustafa told me that we were expected as guests in a house of the village.

We drove from the town center towards the high, hilly hazelnut orchards. The village spreads across a huge area both horizontally and in terms of altitude. The houses of Black Sea villages typically are scattered around among broad hazelnut gardens. As we reached the highest point at the end of the day, I realized that the village was large. Due to its location close to the coast side, it was located on a high, in fact, flat plateau instead of steep slopes. This feature distinguished the village from other more typical villages of the east Black Sea region, but it also allowed the village access to the town center. Influenced by this closeness, the village's houses are all well kept. It has the feeling of a city district. It is very different from the isolated, steep hillside villages that I would visit later on.

As soon as Mr. Mustafa told me that we had entered the village, I pointed to a house and told him to stop the car. I wanted him to introduce me to the residents of the village so that I could interview them. The first house we visited was located in one of the village's several quarters. We left the main road and entered a gentle slope heading towards the house.

As we arrived, we saw five women eating dinner in the house's garden. Their menu consisted of the indispensable Black Sea dishes: green beans, fried potatoes, sliced tomatoes and cucumbers. As soon as we sat down, they served me with fresh food.³⁹ After Mr. Mustafa introduced me to them, he returned into the car to wait for me. To get a start into conversation, I introduced myself and told them that I wanted to hear about their thoughts and experiences. They tried to give me information about hazelnuts to the best of their knowledge. The age of these women ranged between 25 and 50 and they were the daughters and daughters-in-law of the same family.

The landlady spoke diffidently. I learned that she had gone through many difficulties after she had given her signature to a salesman, who had come to their house and deceived her. I tried to relax her and to gain their trust. Conversations about hazelnuts always began with the relation between prices and costs. Even for the food served to us, they would say, "These are all from our own garden. Hazelnuts don't make money, so we sell these... They haven't given a price; the situation is very tough for those employing picking workers." The landlady added, "If things continue to be like this, theft and unemployment will be inevitable. There is no place with work in the Black Sea regions. The young men return from military service just to encounter unemployment." While asking me whether I liked their region, they promptly added, "people like it here, but there's no employment." The landlady had five children. One of them was working in Istanbul. One of her daughters lived in B., a district of Giresun. Another daughter was housewife and her unmarried son worked as car mechanic in the industrial zone.

³⁹ Along with tea, they picked, sliced, and served me fresh tomatoes and cucumbers from garden. When they saw that I was not eating anything, they offered me some cheese and we ate our meal with sincere pleasure.

They told me that they had lived in this house ever since they had married into the family. Before the daughter-in-law married, she had lived in another village. Her mother-in-law had built the house eighteen or nineteen years earlier. They had had hazelnut orchards even before that period; however, she told me that not only they, but also their neighbors had had to sell their hazelnut orchards so as to afford a house. They lived in this house, in this village, throughout the year. Everybody in the village was related to each other in one way or another.

They told me that their children lived in Istanbul and could not visit the village because they were not able to take time off from work. The closeness of their village to the town center had been not enough to prevent their children from leaving. It is not hard to say that life in the village, especially in the central villages, has become urbanized. They go shopping in chain supermarkets and their consumption habits do not differ from those of urban families. “Previously, it was a good amount of money, but the expenses increased.” This statement evidenced that ready-consumption culture had replaced earthbound production and substantial farming as result of the change in the villagers’ lifestyle. Together with consumption habits, their everyday habits also had changed. Previously, weddings had taken place in August and September, i.e., at harvest time. But nowadays, the producers did not wait for the hazelnut harvest to have their weddings.

The group consisted of women from different families. While talking about changing relations, I saw that they considered the presence of the TGB as a type of warranty. The landlady said the following about the previous year’s hazelnut crop: “We sold it to the merchant at 2.5 TL. We had to give it to our son in Istanbul” Another of the women said that the yield of their own hazelnut had been good and

that they had given it to TGB. However, she added that they had been able to harvest only 600-700 kg due to the small size of their orchard. They all had the same question in their minds: “What will happen to us if there is no institution (regulatory agency like TGB) to buy our hazelnuts? How will our children establish their own homes? There are no job opportunities.”

When we talked about the labor division among women, they mentioned that all members of the family worked together when picking hazelnuts. Everybody was included in this labor division without any distinction between men and women: “We’re all together when picking hazelnuts,” they said.

Apart from the decrease in the village’s population as result of migration and the transformation of village life due to the interaction between the village and the city, the people who live in other parts of the country or abroad always spend their holidays in the village and arrange their holidays in such a manner that they coincide with harvest time. Hazelnuts are still the main element that keeps the families together. Even though the labor division between men and women puts men in the forefront with regard the changing relations in selling and market relations, the distinction between men and women becomes blurred in production relations. The involvement of women into business life is limited. “Here, women generally don’t go to work,” said a woman from the group. It was men who had to work. However, unemployment was a general problem for the whole region. The crowded village coffee houses were testament to this unemployment.

Although the fruits and vegetable from their own gardens were cheaper than in the marketplace, the gardens were not big enough to make a living from the produce. The contents of their individual gardens, such as corn, tomatoes, beans, eggplant, and

various fruits, were reserved for their own consumption. Emphasis was put on the decrease in livestock farming along with agriculture. I was told that this decrease was more dramatic in highlands, where livestock breeding used to be the primary source of income 30-35 years earlier. Factors such as the expensive price of feed, the narrowing of market opportunities, the immigration of young people from the villages, and their unwillingness to do livestock farming were among the reasons for the decrease in and even complete abandonment of that type of farming.

Those who have big hazelnut orchards in the village enjoy a high degree of influence and good reputations. The big producers are active and influential persons both in the city and the village, not only in terms of their relations with the institutions, but also with respect to their individual relations. Taking into account that the village's biggest producer is also abandoned livestock breeding, it could be said that big producers give shape to the habits and behaviors of other producers in production processes. The inhabitants of the village have the chance to benefit from the connections of these people who provide employment opportunities for the villagers. This kind of employment is a source of hope for the village's unemployed, uneducated residents, although it is short termed, lacks any social security, and calls for flexible working conditions.

Costs play an important role in the question of whether agriculture and livestock farming can serve as a primary source of income in villages. Costs such as electricity, water, and transport are among the leading reasons that lead producers to abandon the agricultural production. A woman from the group said, "We constructed storage. It operates with electricity. We don't just pay rent. We have to pay for everything."

The scarcity of that year's hazelnuts troubled them. When they were in need of cash, they did not want to ask the merchant for money: "No, he will request double the amount; he will charge interest." If they are in need of money, they prefer bank loans. They told me that the state banks grant loans on retirement pensions. In that case, half of the pension is automatically deducted for loan repayment: "Look, there will be so many weddings. You have to tip at least 20,000-30,000 TL every time... Weddings are very expensive here." The transformation of village life and the shift from communal life to nuclear family structures have led to break up of family budgets in conjunction with the increase in expenses. The landlady explained: "Newly married couples have their own homes. Today, brides don't want to live in the same house with their mother-in-laws." We all burst out laugh. The splitting up of land brought about the splitting up of families.⁴⁰

In the village, to reach other producers, we moved on. As we went up the hill, we arrived at the village center. Like the other villages, the center was built around a mosque, if there was any. We thought that most villagers would be at the mosque for the Friday prayer and planned to reach them there. A "mevlid" (Islamic memorial service) was being held in the mosque at the time we arrived. The men were inside of the mosque while the women were listening to the ceremony in the mosque courtyard. We waited in the car until the ceremony was finished. After the mevlid, a crowd filled the courtyard as the men left the mosque. We got out of the car. Mr. Mustafa instantly approached the crowd and told them that I would like to interview

⁴⁰ During our conversation, a young man came and brought an invitation to his wedding. Thereupon, we began to speak of the gold gift that had to be presented to the bride and groom at the wedding. They told me of the tradition of reciprocity, according to which gold had to be given to marrying couples in turn. They thought that the new generation made profit from this tradition. They married down in the city. The landlady admitted how distressed she was as she said that her son was going to be married.

them. They turned their eyes on me; in fact, I could not hear what they were saying. With their eyes squinted, they tried to understand what Mr. Mustafa was saying.

Then, all of a sudden, an announcement was made from the mosque loudspeaker: “We have visitors from hazelnut research studies. They want to inform us.” I became worried; because I was there to get information, not give it. In addition as I found myself surrounded by the crowd it crossed my mind that the expression “hazelnut research studies” sounded like an official institution of Hazelnut Research Institute. The women remained in the background, because they were not as enthusiastic or as involved as men in this matter. A voice from the crowd said, “Let us hear you.” To save the situation by “giving information,” I started to talk about the new law. This was sufficient to get their view on this subject. Black Sea people are quick, anyway, and they like to speak.

An elderly man began to speak angrily: “Don’t you know that they told us that trees will be uprooted per decare and a support of 600 TL will be granted to them? But the support will be only for three years. After that, this will end to. Everything is up to the merchant; we will give it to him.” It was obvious that I would not get the chance to ask questions, so I continued to listen to them. Another person wound the tension up: “We expect support from the government. There has to be support. The prime minister is the father of the state. He can’t toss his people out the door; he can’t let his people starve; he has to do something. Those who govern us can’t make our daily bread available to others.”

As I intervened to ask their opinion about the prices, the answers changed: “We don’t know that. Last year, it was 5 TL”; “may be 2.5-3 TL” “not more than 3 TL.” “There are no hazelnuts in the region this year.” A member of group, his bloodshot

eyes wide open, said: “You can’t just say three. Say that you won’t sell it below five!” He showed his reaction to the person who had estimated the price as three. He feared that any expectation or saying for a price blow five would emerge and become real.

Another person responded, “Even if we won’t sell, they will grant support anyway. 150 TL per decare ... Say, he has 10 decares of land, what will he receive? What will happen? He will scatter it around.” After a while, the imam of the mosque joined the discussion. Quietly, he said, “Okçuköyü village has an altitude of 800 meters. What will those people plant? This is not Tekirdağ (in the West part of Turkey with high product diversity), what are people supposed to do?” The majority of the producers argued against the withdrawal of state intervention: “Hazelnuts can’t satisfy us, not without the support of the government. Without support, things seem violent.”

Subsequent to this unexpected, vehement discussion at the mosque, Mr. Mustafa and I went to visit a house whose landlady was awaiting us. Mrs. Birsen was a restless woman. She bustled around the house to host us in the best manner possible. There was also the wife of the imam among the group that had welcomed us. They had cooked a meal for us: bulgur salad, fried potatoes, sliced tomatoes and cucumbers, and tea. The conversation among the women did not start talking about the hazelnut production until I started to ask questions. The women did not involve in the hazelnut production and exchange as long as their husbands engage into these processes.

Then, I moved on into the village with Mr. Mustafa. We stopped at another house. The daughter-in-laws of the house laughed in their shyness. One of them lived

on the ground floor of the house and she said that she used to live in the upper part of the village before she got married. They offered us some of the pears that they were eating. After some hesitation, they asked, “what kind of questions will you ask?” As our conversation progressed, they began to relax. However, the cause of their actual concern was their fear of failing to give correct answers to my questions. I asked a few questions about production and picking processes. “We buy our fertilizers on credit. We discharge the debt when we have sold the hazelnuts. Workers come for hazelnut picking. They are from Adıyaman, in the Southern Turkey. After the hazelnuts dry, the money is received from another person. Last year, the prices were announced very late, leading to huge losses. We allocate a house for the workers. The house right over there (*she pointed at the house*).”

Then she continued: “This village is close to the town center. I live here year round.” We mentioned how well kept the houses were; the windows of the house had been renewed recently. I asked whether these were done with the gains from hazelnut. She said, “Hazelnuts bring money from year to year. Last year, there were a lot of hazelnuts, but they didn’t make money. This year, we are in Ramadan; we will begin picking earlier. This year’s hazelnuts are half of last year. It is slightly better in some places and slightly worse in others.” I asked whether hazelnuts were a primary or secondary source of income. She responded that the income from hazelnuts was important and added: “We never use it. My father-in-law does. He is building this house; we will live here together. Nothing remains for us. Or the children pick them, as appetizers. But hazelnut is of course important for everybody.”

We departed to visit the house of an old man, who had seen me at the mosque.

He was sitting in the garden of a very old, two-story, wooden house together with his three sons, one daughter-in-law, and two grandchildren. The father of the house looked even older in his worn-out cloths. He lived together with his sons and daughter-in-laws. None of the members of his family had migrated away. Not because there were well off, but because they had no other alternative. Income distribution displays irregularities even within the same village. Families with no migrant, public servant, or fixed-waged family members had to cope with tougher economic conditions. The old man has the social security for farmers [*Çiftçi Bağkuru*], but his children could not benefit from this insurance. They had to live without any health or pension insurance. The tea was served, as during each other visit.

The old man began to speak:

In the past, we could get our money; we always had money. But now, I have a son or a daughter to be married. This all requires money. I'm 69 years old. I asked my father when these hazelnut trees had been planted. He said, 'son, I asked the same, but I was told that only my father's father would know the exact time.' You, calculate it. For years, we gave our hazelnuts to Fiskobirlik, but we couldn't get our money. We are injured. What are we supposed to do? Would a father ever abandon his child? No, he wouldn't. We expect support from the government. They have to help us. What shall we do? The TGB isn't on the scene either. Previously, I gave to the TGB that way: I brought the hazelnut there, but they said that it was rotten. I brought it back home, but couldn't keep it there. So, I brought it there for the second time. They purchased it only after a bribe. Why do have things have to happen like this? A neighbor of mine gave hazelnuts to Fiskobirlik. It has been four and he still has not been able to receive his money. We suffered very much from the merchant. He will do it to [*suppress*] everybody he can. They introduced the free market. This decision was taken years ago. But they did it [*put into practice*] this year. They will grant support for orchards, but not this year. We won't uproot any of our trees. You can't plant anything else here. Kiwi might be possible, but it lacks a sufficient market. You can store hazelnuts for two years. Nothing will happen. But kiwi will rot within five months (Appendix, 6).

The price increase in 2006 influenced producers deeply. After that period, they had

begun to rely on these prices. A producer made following statements: “[*Hazelnuts*] were 7.00 TL; then 2.5 TL. This year’s price is still uncertain. I can’t handle it under the present circumstances. I have no title deed. I sold my hazelnut at 2.5 TL; I can give it jointly with other family members.” Referring to the uncertainty in this process, he added: “We have no influence. We pass in hours. Will he [*merchant*] buy our hazelnut at all? If yes, what will the price be? Will he buy it at 1 TL and export it at 8 TL? We don’t know. What will happen? People will go at hammer and tongs, stealth, assault.”

In my interviews with producers, they clearly had difficulty accepting the point prices had reached, referring to the frost in 2004 and 2005 in conjunction with high price periods. This showed both that they had not good command of these processes and that these processes had created expectations among them for higher prices in the following years. Even though this old producer, whose house we were visiting, associated the boom in hazelnut prices with the increase in the amount of hazelnuts by saying, “in 2004, they sold it at 6 TL, but there were no hazelnuts at that time,” he did not share the opinion that the major crisis had been induced by the pricing of the Fiskobirlik the year following the 2004 frost that had led to the initiation of the bankruptcy process. Producers considered the price determined by Fiskobirlik as their reference price and shaped their expectations accordingly.

Another period referred to by producers was the years, which they referred to as “the best period.” These periods were when the hazelnut purchase prices were considered as high. Fiskobirlik’s purchase price was 2.52 TL in 1997 and 2.51 TL in 1999 (Table 5).

Table 5: Hazelnut Support Purchase Prices (1994-2003)

Year	Support Purchase Price
1994	1.45
1995	1.78
1996	2.00
1997	2.00
1998	2.51
1999	2.42
2000	1.70
2001	1.04
2002	0.98
2003	1.85

Source: Fiskobirlik Economic Report, 2003.

The comments indicated that “hazelnuts were worth money and that farmers were happy.” However, one could hardly say that this period had lasted a long time, taking into account the consecutive economic and financial crises that had emerged as result of such populist policies.

A significant part of hazelnut producers consist of producers who have an extra income apart from hazelnuts. Public servants and pensioners are in majority, while the group with no extra income apart from hazelnut receives financial support from their children who have migrated to large cities. However, those of this section, who live in highlands located far from the town center, depend on hazelnut as their primary source of income. The separation of the living standards of hazelnut producers came into prominence in two major aspects. These are, first, the lack of a primary or secondary source of income; and second, the differences emerging between producers living in high villages.

Producers who lived abroad or in other cities come to the village at harvest time to see their families and to look after their hazelnuts. The wages and pension

salaries paid abroad are much higher in comparison to those of domestic producers. The producers, living abroad, had come to the village for one month to pick hazelnuts; however, they complained that they did not know the price.

The interviews with producers were aimed at enhancing the difference and diversity of the region. For this purpose, I tried to reach producers through my own personal contacts along with personal networks. On a weekend during my stay in Ordu, I was invited for breakfast to the home of a young couple who were acquaintances of one of my relatives. In the early morning on Saturday, I took off from Ordu to Ünye. I was going to meet them for the first time. Nurgül works as a nurse and Barış works as an officer in the public hospital. Their house was in Ünye, one of Ordu's largest central districts. Their house in Ünye was a duplex located in a housing estate with high-rising apartment blocks with a view of the sea and the hazelnut orchard. The rents are relatively cheap in Ünye compared to the large city and the couple both working as public servants were making a good living.

We planned to go to the hazelnut villages in the highlands. However, I was supposed to understand how difficult their living standards were compared to those of the hazelnut producing family of the couple after my visit to their village. We had breakfast on the balcony and then set off to the village, where the parents of Nurgül lived. This was also the first time for Barış; he had visited Nurgül's village before. The road to the village was rough; part of it had washed away during a flood. Our journey on this road got even tougher with each vehicle coming from the opposite direction. According to Barış, there used to be minibuses that transported people to the villages, yet as the number of passengers decreased the minibuses were removed completely and people began to use their own cars.

The houses are typical country houses. There were piles of battens, *filbert*, and firewood piled up for cold weather. They told me that, in the past, every house had had its own oven and people would dry corn and make corn flour and stuffed black cabbage.

As we arrived in the village, we could find nobody in the house. As we expected, we found Nurgül's parents in the garden. They were very happy to welcome their daughter and son-in-law to their village. In the hazelnut garden, we sat down on hazelnut sacks filled with husk and moved into a deep conversation. Nurgül's father used to be a greengrocer; however, he had quit working due to the low sales, and he had not been able to find another job due to his advancing age. He has three daughters. There was a time when they had considered taking the boy of a relative, yet had given up after the girls' harsh objections.⁴¹

Here was a clear example of fragmented families, breaks in village life, and the abandonment of hazelnut production. A father and a daughter, they lived two different lives. I asked a few questions to Nurgül's parents about hazelnuts. My questions astonished Barış and Nurgül. They wondered how I could know so much and said, "These questions never crossed our mind although we have been producing hazelnut for years." Nurgül's father looked sad while answering; the lack of a fixed income troubled him. I learned that they lived in Barış' house in Ünye during winter months due to financial difficulties.

We left the garden and went into the house. Her mother served local dishes such as corn, baked eggplant, corn bread, and pickles. She had prepared them for us in advance; we ate our meal with real pleasure. After the meal, we also visited their

⁴¹ Some parents want a boy as having a boy is important for them for the continuity of family name and the division of the family's immovable.

relatives and neighbors in the same village. They were all large families and I got the chance to talk about hazelnut production conditions with people involved in the hazelnut production. Although, in uprooting, both women and men work collectively, in exchange, mostly men are engaged in and have control over the hazelnut sales.

In the evening, we set off for Dumanlı, the village of Nurgül's cousins. Her mother was very happy because we went there altogether as a family. The region has an altitude of almost 750 meters. They showed me our destination when we were at the house of Nurgül's parents. Looked at from down there, it was at the very top of a high mountain. The residents of the village reached home via municipality buses. I was told that although these minibuses operated just once a day, the ticket prices were reasonable. It is cold in the highlands; stoves are used for heating.

We arrived at Dumanlı. The people, whom I was meeting for the first time in the village for the purpose of my study, treated me as if I were one of their children from the first moment when they saw me.⁴² The village was made up of old, two-story country houses (Fig. 7). The crowd in the house was due to hazelnut harvest; the two families had come together in harvest time. Only four of them stayed in the village during winter, the others worked as public servants either in Trabzon or Giresun. The family members who stayed in the village produce milk and cheese in the winter months and sell their products in the marketplace of the town center. They served us fresh corn bread and stuffed black cabbage with corn flour. As in all country houses of the Black Sea region, they planted corn, cabbage, and beans in their gardens. The homeowners are asked to keep the food that they had prepared

⁴² All of them were very gracious, respectful, and humanistic. I sensed a feeling of respect and regard in the contents of the answers they gave to my questions. This perception was the result of the private conditions, which they shared with me.

especially for us, for themselves. That night, I got the chance to talk to all of the family members one by one. The younger members helped me during my conversation with the elder ones and everybody gave sincere answers to my questions.



Fig.7: An old house in a hazelnut village

Source: Ebru Tekin, 2009.

From there, we visited their neighbors. The family lived under tough circumstances. We sat in at the entrance of the house. The stoves burned here in mid-August. They steeped tea for us. The homeowner had run into a hazelnut branch during hazelnut picking and injured his eye. He talked of accidents that might occur during hazelnut picking such as cuts arm-leg injuries caused by scythes, falls, and poisoning. None of these people had social security or regular jobs. In these highland villages, it was

impossible to earn a living by hazelnuts alone. These families got support from relatives that had migrated to work as public servants. We returned to the city center at midnight and spent the night at Nurgül's house. The day following, I left Ünye.

My connections were not only effective means for reaching producers, but also in reaching distinctness and diversity. I became acquainted with Mr. Süleyman, whom I had never met before, through the channel of producers' unions.⁴³ I reached him by means of reference. The same day, I set off as soon as I heard that he was awaiting me in Fatsa. Mr. Süleyman was a tractor driver and that he operated haymakers during the harvest time.

I met Süleyman in Fatsa. The minibuses operated once a day from the town center to the village in the evening and from the village to the town center in the morning. So, we took the evening minibus to get to the village. Mr. Süleyman's speech was slow and quiet as were his steps. He went shopping in a supermarket before we set off for the village. After we got out of the supermarket, we began to walk in the direction of the minibus station. The minibus was full of villagers who had done their shopping in the city. The minibus was packed; the heat made it impossible to breath. Everybody was sticky with sweat and continuously stared at me. At last, one of the passengers could not stand it any longer and asked who I was. Mr. Süleyman introduced me to the best of his ability.

The village was one hour away and was located at an altitude of 500 meters. We crossed high and steep mountains. During the entire journey, Mr. Süleyman and the passenger sitting next to him talked about picking workers who had come from

⁴³ The person who had helped me to get in contact with Mr. Süleyman was a manager of that company and his friendship with Mr. Süleyman dated back to the days when they had been members of the same political party. He was one of those people who had adopted the left-wing line established by Fikri Sönmez, the founder of an authentic local administration example in Fatsa in the 1980s. They positioned themselves as leftist and social democrats.

the east and southeast. The discussion focused on Georgian and Kurdish workers, in particular Kurdish ones. His conversation partner always associated the topic with terrorism. Süleyman expressed his opinion in his quiet way: “Things will go worse if we treat them like this. They, too, have the right to see civilization.” However, it was very hard to convince his conversation partner, as it was the case with many other people.

The road grew even rougher and steeper as we gained altitude. The hot, sultry air in the town center left its place to the cool air of the highlands. As we got closer to the village, the villagers began to get off the minibus one by one as the driver stopped in front of each of their houses and help them to unload their belongings from the minibus. I realized that we were close to our final destination.

We entered a very old, wooden house, just like all of the other houses in the village. His daughter Çiğdem welcomed us. The kitchen of these country houses served also as a sitting room. We took seat on a broad, wooden couch. The interior design of village houses is always the same: kitchen, oven, and wooden same couch. There is a television in some of the houses. They generally sit in the kitchen heated by a stove. During the two overnights, during which I stayed there, we were going to sleep together with Çiğdem on the couch in the kitchen. With Süleyman and Çiğdem, we began to talk in the kitchen. I learned that they used to live here until Çiğdem started school. In the past, the houses there were all full during winter. However now, they went there for only for five to six months a year. While we were conversing, the mother returned from the hazelnut orchard. She was a young woman named Gülhanım. She hugged me with a large smile on her face and joined the conversation.

Before it got dark, we left the house so that I could interview the producers in the village. Süleyman and Çiğdem helped me with patience. As the day faded into night while we were interviewing in the neighbor house, she came to call us home. We had to run on our way home, as it had begun to rain all of a sudden. The table was already set on the floor of the kitchen on a gingham blanket. Gülhanım had cooked chicken and rice, which Süleyman had bought from the supermarket at the city center. I became embarrassed when I realized that Süleyman had shopped for my visit and I was unable to offer them anything in return. We lit a candle as the electricity went out for a short period of time during dinner. The next day was the first day of Ramadan and that night was the first night of sahur [*meal eaten before dawn during Ramadan*]. We all went to bed early.

Before dawn a woman knocked on the kitchen's window to wake up Çiğdem and Gülhanım for sahur. Gülhanım told me with a laugh that she had overslept the year before, so her neighbor had wanted to wake her up. During the time I stayed there, nobody in the house fasted. They told me that they did not fast on every day of Ramadan, but only when they felt fit for it. With the aim of not offending the group of fasting people and to conceal the fact that they were not fasting, Gülhanım took care to close the curtains of the kitchen during meal times. Even though this may seem like a sort of peer pressure, there was no compulsive and binding pressure in the village. Gülhanım smiled as she closed the curtains and explained, "We don't want anybody to see us, and it would be shameful."

The next morning, we got up at 6:30. For breakfast, we had halva, cheese, olives, tirit [a local wild mushroom]⁴⁴ and pickles. Mr. Süleyman had gone to work

⁴⁴ Tirit grows in the hazelnut orchards. The villagers gather them and sell them in the village marketplaces and cook them at each meal.

with his haymaker early in the morning. With Çiğdem, her mother and her brother, we removed the cover of the harvest, which was laid right beneath the house. The harvest was large in amount. We removed the canvas holding it on both sides. There were water accumulations on it, because it had rained the previous night. We took care not to get the hazelnuts wet.

All of a sudden, Gülhanım startled as she had seen a mouse, not because she was afraid or disgusted, but only irritated. Again, she laughed. We went down the slope filled with corn stalks as tall as a man to reach the orchard. I was told that it was easier to pick hazelnuts on slopes. The orchard was in a broad valley filled with hazelnut orchards against a backdrop of high mountains reaching up to the sky. Gülhanım pointed to the orchards of their relatives, who lived up there. She told me that one could walk to the hill across the valley as she said to her daughter, “let’s visit them soon.”

During my efforts to pick hazelnuts one by one without doing harm to the offshoots, I realized that I had injured my hand only after a long time. Then I decided to pick up the ones that had fallen on the ground, as it was much easier. I was thinking of my fear of bugs and small reptiles, having serious concerns about the length of the day. I could not bear it even for one single day as a person strange to soil. I noticed that they were picking hazelnut much faster. When I asked them why it took so long for me to fill a sack, Çiğdem and her mother laughed and advised me to grasp the hazelnut with my full hand instead of my fingertips. We picked hazelnut until noon with frequent pauses.

At about 12 o’clock, we returned home for lunch. Gülhanım prepared pies, beans, pickles, biscuits, and tirit for lunch. Their picking workers were busy in

another orchard on that day. Çiğdem and her mother picked hazelnut that day so as to not fall behind schedule. It was impossible for them to pick all of the hazelnut in the garden in a short period of time. In the previous couple of years, Mr. Süleyman, in partnership with one of his friends, had employed Georgian workers. The house accommodated the three children and the wife of Süleyman along with the female Georgian workers. The male workers stayed in the house of Süleyman's friend. The women came to Süleyman's house only to spend the night.

The working conditions of the Georgian workers differ from those of the other picking workers. The workers from the east and southeast regions work under the leadership of a *çuvalbaşı* and a *dayıbaşı*. However, this system did not apply to Georgians. In other worker groups, double wages are paid to the foreman, *dayıbaşı*, and cooks. This creates a sort of variety and commoditization in the pricing of labor, while the Georgians are not even aware of such a waging system. The commoditization process of Georgians differed from that of the Kurdish workers. The ignorance of Georgian workers towards the existing market conditions, the existing hierarchy established among workers, and the pricing of this hierarchy indicated that Georgians are at the beginning of this process.

Like all other picking workers, they have no social security. Moreover, their employment is illegal as they entered the country on tourist visas without instead of work permits. They started to work at 7:00 in the morning, took a pause for fifteen minutes at 10:00, and had lunch at 13:00. At 16:00, they took another pause for fifteen minutes and stopped working at 18:30.

The workers ate their meals in the other house. The Georgian woman who was the leader of the group and Süleyman got along well with her. The distance kept

from the Kurdish workers did not exist between them. Even though this was associated with the mutual relationship between producers and workers, I observed that the humanistic and leftist respect of Mr. Süleyman was another effective factor. Çiğdem told me that she had had a great time with the workers the previous year, but that they, this year, could not find the time. Laughing as always, Gülhanım said that the young men of the village were fond of the Georgian worker girls.

On that day, after our short experience of picking, towards evening, we returned home. Çiğdem and I took baths. We fell asleep on the couch in the kitchen, although we had taken frequent breaks while picking hazelnut during the day. When Çiğdem's brother came into the kitchen later and began to cook corn on the stove, we sank into a deep sleep. Sometime later, I noticed that Gülhanım had put a blanket over us and we continued to sleep in the warmth of the stove.

We woke up at sundown. Gülhanım entered the kitchen carrying tirit, beans, eggplants, tomatoes, corn, and pepper from the garden in her hands. When Gülhanım returned, she told us that she had picked one more sack of hazelnuts from the ground so that they would not float away in case it rained. She added wood to the stove and began to boil corn. We ate with great pleasure after dinner, as was usual in every Black Sea house.

Before it got dark, Çiğdem and I went visiting so that I could conduct a few interviews. Everybody was in a rush for the fast-breaking meal. In the morning, before going to work in the hazelnut orchards, they knead dough and bake it slightly on iron plates on the fire, and it put it aside to bake during peak hours. The rush of Ramadan could not be felt much in the house in which I stayed as my hosts did not bind themselves to strict fasting rules. However, a hustle and bustle prior to the fast-

breaking meal dominated in the village. As I was making a phone call outside the house at fast-breaking time, Gülhanım appeared in the window and called, “Ebru come in, it’s time to break the fast” with a sly tone in her voice. We had bulgur salad, rice, tirit, and corn soup for dinner.

After dinner, we visited a house in the upper part of the village. The owner was a sophisticated, communicative woman with a bachelor’s degree. Her husband had died and her son went to university. She was a person struggling to make a living. The next-door neighbor was also widowed. Her husband had died in a motorcycle accident on his way home from the other village one night. She tried to earn her keep by clearing other people’s homes. The houses were old and rundown, as compared to newly renovated houses located in the villages close to city center.

That night, Mr. Süleyman had not returned yet from haymaking at the time we went to bed. The workers had not returned yet, either. I could hear their arrival from the noise caused by their footsteps in the wooden house. In the morning, as the time came to leave the village, I had to take the morning minibus to reach the town center. After we woke up in the morning, Mr. Süleyman wanted to introduce me to some people in the surrounding villages, as he had promised before. After breakfast, Gülhanım and Süleyman went to the orchard to carry the previous day’s hazelnut sack from the garden to the trashing floor. We had missed the minibus by the time they returned. Mr. Süleyman left the house with me; he wanted to take me to town himself. He arranged a passenger car that operated like a collective taxi between the village and the town.⁴⁵ That day, he made arrangements so I could meet several producers with various profiles and land sizes reaching from five to fifty decares.

⁴⁵ The fact that Süleyman devoted all his time and all of his opportunities for the sake of my study meant a lot to me. He insisted on paying the fare although he was in need of money. Moreover, he called me after we had parted to apologize for having forgotten to ask me whether I had money.

On my last day in Giresun, I was to visit one last village in Giresun. I took my luggage and set off to B. on my way to H.⁴⁶ I was going to visit the same family in which I had visited the previous year and stayed at their houses. Mr. Mehmet who is the producer, whom I was going to visit had called me the previous day and told me that his nephew Mr. Özgür planned to come from the town into the village and that he could pick me up. Transportation to the villages was scarce. The roads were so rough, steep, and deserted that it would have been impossible for me to go there on my own with and without a personal car. The minibuses operated only once a day: from the town center to the village in the evening and from the village to the town center in the morning.

Mr. Özgür picked me up from the teachers' lodge, where I stayed, for our journey to B. Together with a friend of his, we went to pick up his family from their home located in a five- or six-story housing estate in the center of B. A newborn baby, its mother, its grandmother, and I sat in the backseat of the car and we set off in direction of the village.

The signs of the last floods could still be seen on the roads. One road had collapsed; repair works were continuing. The flood had floated the wastes of B. into the river; garbage hung down from the branches of trees like scraps of cloth on a prayer tree. We continued on our way to the village on rough roads. Mr. Özgür was a colorful, lively, kind person full of spirit. The others, too, were very cordial like all of the other people I had met so far.

When we reached the village, at an altitude of 600 meters, we went to the house of Mr. Özgür's mother. It was a large, three-story house that had been renovated recently. There was an empty garden in front of the house. Another car

⁴⁶ B. and H. are the names of the district and village, respectively, that I visited.

arrived at the house right after us. Mr. Özgür's brother had come from Trabzon together with his wife to visit their mother. That day, the whole family would gather. We left the baby, its mother, and grandmother at the house and began to walk towards Mr. Mehmet's house where I had stayed the previous year. Mr. Mehmet produces hazelnut as a primary income and lives in the village with his family and mother. While we were walking, Mr. Özgür told me of the days when the villagers used to drink beer in the village's coffee house fifteen to twenty years earlier.

When we arrived at the house, the grandmother, mother, three sons, and father of the house, who were thrashing their hazelnuts to dry them, welcomed us. The group with which I come had brought a sacrificial sheep and called the house's father to butcher it. Mr. Mehmet called himself a "*ırgat*" (workman) to mock the situation, half-jokingly. Even though the two families were related to each other, their different lifestyles, caused by dissimilar economic conditions, had created a sort of alienation between them. The daughter and son of the family with which I had come had grown up in the city and were well-educated people with high incomes. The current generation was not farming, but their parents had not broken their connections to the hazelnut production, yet. When we returned to the house in the lower part of the village after we completed our interviews with the villagers, the sheep had been butchered already, and the dishes were ready.

Mr. Mehmet and his family lived in B. during winter months. His siblings and his mother owned land with joint cadastre. Mr. Mehmet had six sisters. A while earlier, his sisters had signed a written consent and had left the orchard of 28 decares to Mr. Mehmet of their own free will. They no longer had a share in the hazelnut profit. In the years of frost and crisis, i.e., in 2004 and 2005, Mr. Mehmet had failed

to make any profit from hazelnuts. His sisters living in Istanbul had sent him money to help him overcome this tough situation.

He told me that they had incurred no production costs that year, since they had carried out all of the work by themselves. Due to uncertainties, they had not been able to buy fertilizers or pesticides. These uncertainties had comprised aspects that were associated to the scarceness of hazelnuts, the expensiveness of pesticides, the low price of the previous year's hazelnut, and the uncertainty of prices. Mr. Mehmet was giving his hazelnut to a merchant who was a relative, Mr. Özgür's brother. Mr. Mehmet owed no money to the merchant; however, he had taken out a bank loan: "This year, I will bring it (the hazelnut) to my nephew when it's dry. Mr. Özgür's brother purchases hazelnut. He has opened his shop recently. I can't bring them to anyone else; it would be shameful... I will give them next week; I have to make a payment to Denizbank on the 30th of September."⁴⁷

He had certain expectations in relation to the new support decision, but lacked detailed information. They asked me for more information. I provided them with detailed information. As one of the producer who had been granted a loan in return for Fiskobirlik's debt, Mr. Mehmet explained that period in the following words:⁴⁸

We have lost our trust in Fiskobirlik ... They said 'we will buy the hazelnuts and pay for them.' But we have still receivables from 2006. There are also in debt to Şekerbank ... Fiskobirlik made an agreement with Şekerbank: 'you will get a part of the money.' We couldn't get it in Giresun, we were too late. They told us: 'You have to go there on Wednesday and line up.' So we did. They hung up a list and hired a bus. I went there together with my sister's husband a guarantor ... We had to sign a sheet of blank paper. They told us that wouldn't get anything if we refused to sign ... I had borrowed 4,100 TL. [*With the interest*] it rose to 5,200 TL. It's said that I have to pay if they don't. This was the rumor, but they told that Fiskobirlik was going to pay it

⁴⁷ The credit policies adopted by the banks towards farmers lacking fixed incomes will be discussed in subsequent sections of this chapter.

⁴⁸ Retrieved from notes of in-depth interviews.

for sure. In the past, I had no concerns about my hazelnuts. I had no fear. It was a safe harbor for us, knowing that they would buy it anyway. The Fiskobirlik management came into conflict with the JDP. So, the TGB was established ... There was trust and support in the past. We could buy flour and other provisions from small retailers on credit without having to pay any interest. But now, the future of hazelnuts is uncertain, we are afraid (Appendix, 7).

During uncertainty, the producers coped with the situation by taking debt from the merchants. The producers who are in debt have to give their hazelnuts immediately to the merchant in the exchange of borrowed money.

Mr. Mehmet said that:

This year, I received a high amount of money for the first time and spent the money for my child's engagement ceremony. The situation is critical. We don't know whether there will be hazelnuts or not. But I have to borrow money anyway. There will be the engagement and wedding ceremonies of my sons and daughters. I have borrowed this money within seven months. They won't charge much (interest) because I have given my hazelnuts to them for the last four to five years. Previously, we took labor costs from the merchant in Ordu. But this was the case only one or two times. No interest is charged. But if the purchase takes place on the 8th month, they cut it from the hazelnut price (Appendix, 8).

H. is not a small village. Its settlement layout is not dispersed; in fact it is relatively condensed in contrast to other Black Sea villages. Since the village was located on a very steep slope, the individual houses were set apart from each other. I remembered that I had hardly been able to stand on my feet as I tried to pick hazelnut during my visit to this village the previous year. The producers tied ropes around their waists so that they could do the picking work. At the same time, they wore rubber shoes so as not to lose their footing. Mr. Mehmet gave them the nickname "pirelli" to give the pickers a hard time. That day, Mr. Mehmet's wife introduced me to their neighbors. She was one of those people who accompanied me without showing the slightest sign

of boredom. We went to the house right next to theirs. The resident of the house was preparing corn. They lit a fire outside the house and boiled fresh corn in it. The producer explained their coping strategies. They coped with the help of family members. They lived in the child's houses in the winter times.

I'm 56 years old. My two sons work; my daughter is a housewife in Istanbul. We go there, too, in winter. I'm a farmer. I have one year to go until my retirement in next August. I receive veteran money. I have a joint/share-divided title deed. Thirty decares in total... The land has been divided among four brothers. My share corresponds to eight decares. The girls waived. Otherwise, the land would have been divided into twelve, together with the mother. Before my father died, they gave the land to us, four brothers. The girls received a small amount of money. I brought my children from Istanbul. The bus cost me 750 TL plus 750 TL for wages... I had Kurdish workers. They stay in the house of one of my relatives. They worked two days for me. During those two days, they stayed in their tents in the garden. They are good pickers. We are obliged to [*employ them*], since there are no other men... I have taken out a fertilizer loan from Agricultural Credit Cooperative of 3,000 TL. Together with the interest payable, it has risen to 5,000 TL. Before, I took a loan six or seven years ago, when I was building my house. After that, I didn't take up any further loan. I have no credit cards. My nephew took out the loan on my behalf. I buy my fertilizers, etc., in cash. My son, my daughter-in-law, and I live together in the same house (Appendix, 9).

In the village, the producers picked their hazelnuts, but were not sure how to value them after the completion of the harvest. They gave ambiguous responses to me. Those who had been able to make their final decision to sell or postpone the sale of their hazelnuts were producers who did not owe money to the merchant, received support from their families and/or children, or received government/pension salaries. The neighbor of Mr. Mehmet's family made the following statement: "This year, I will postpone the sale of their hazelnuts for a while. I don't know if it will make money in a short period of time. However, I can keep the hazelnuts in my house until November. Mice emerge after that. I will sell them in November and go to Istanbul

subsequently. I hope that they will make money. We can't know what the prices will be at that time. If I sold them today [*at the time of harvest*], it would only cover the costs.”

Mr. Mehmet's wife accompanied me during all interviews that I made in H. That night, we went for dinner to the house of Mr. Mehmet's nephew, who lived in the city with his wife and child. His brother and sister-in-law were urban people, too. However, his mother and his brother-in-law lived lives deeply interconnected with hazelnuts: they also had entered into the hazelnut trading business. After the death of father, the mother had begun to care of the hazelnut and gardening. She was a strong woman who had taken the responsibility of her children after the father passed away. That night, they heated the barbecues to grill the sacrificed meat. Some of us ate in the open air near the grills, while some women, the elder members of the family, the children, and I enjoyed our meal in the house. After the floor table was set, they put the whole pot of braised meat on the table. Everybody grasped a fork and began to eat. Nobody could expect that the night would come some to such a bad end.

Animosity within families is a very frequent issue in the Black Sea region. Quarrels and conflicts might arise between relatives due to the sharing of assets, land, and soil or by reason of clashing individual interests. There were cases, in which these quarrels and conflicts turned into acts of violence or armed interventions. The hazelnut villages on the seaside slopes of the mountains that rise from the Black Sea as if they would come out of nowhere are deserted at night. The land is dominated by a peaceful silence that prevents the feeling of isolation. With fear though, everything takes a much different shape.

That night, an incident happened that reminded us that this isolation could be

frightening. Together with one old person, one baby, and two infants, we were twelve people in total. As we were drinking tea in the kitchen on the second floor together with the children, another group was watching the preparations for the barbecue. The family members had ultimately found the opportunity to have joyful conversations with their relatives, whom they had not seen for a long time.

While they were conversing at the barbecue, a newcomer joined the group. He was also from the family; in fact, I was told that he was having some problems with one of the family members. I could not learn the exact reason; however, from the comments around me I was able to make out that the one near us had injured the other with an axe. In the late hours of the night, I heard the noise of two gunshots as I was walking down the stairs on my way into the garden, where I wanted to converse with the son-in-law, who had recently begun to work as merchant. I immediately turned back upstairs out of fear although I, at first, could not understand that a gun had caused the noise. Right at that moment, I ran into the house. The guy who escaped also fled inside. His bewilderment, caused by his armed relatives chasing him, doubled when he saw me. For a couple of seconds, we stared at each other. Then he took to his heels and I saw him never again.

I ran upstairs. When I arrived, I saw that the women and children were lying flat on the floor. Without the slightest sign of fear, the mother immediately ran downstairs. The chased person was her brother. Armed men had entered the garden of the house and fired their guns into the air. However, we could not make out if anybody had been injured, since we could not see what was going on. T., the mother of the newborn baby, began to cry with the thought of her husband out there. The baby in her arms began to cry, too. The hues and cries from outside intermingled

with the screams inside. The anxiety of being unable to understand what was happening faded with the decline of the noise. I do not know how, in fact, they had managed to convince the men to leave the garden.

The atmosphere calmed down. It was obvious that the men had come to intimidate. We assumed that the car, which had driven by several times during the late night hours, belonged to them. My hosts told me that they had called the gendarmerie while the incident was taking place. However, the gendarmerie did not show up. The neighbors obviously were accustomed to such incidents and came to the house in later hours of the night. The night had almost come to an end at the time when the neighbor next door finally decided to come and see what had happened. After the incident, we sat on the balcony with the girls and I looked down into the darkness of the slope, thinking how much things were different on this high mountain so far away from the town center. They repeated several times how ashamed they were in front of me. However, I felt as one of them. I was also one of those who had been in the house in fear. We were exhausted out as we set out for the town center at the end of the night.

Following day, I visited high land villages. Aybastı and Kabataş were the hazelnut villages located above 750 meters. After the declaration of the Hazelnut Strategy, these villages were excluded from the hazelnut production and support payments.⁴⁹ It was 08:29. I got on the 16-people Aybastı Kabataş minibus. I was waiting for the minibus to depart. A seat was indicated just in front me and man sat down. He wore black fabric trousers, and a white shirt; his speech was incomprehensible and rapid. Just beside me an old lady sat. She was going go to

⁴⁹ The production restriction in the areas above 750 meters was removed with the Regulation enacted on October 27, 2009. The participant observations were conducted in these villages in September 2009.

Kabataş; it had become a twitch, she was continuously opening and tidying her headscarf. Thinking I would go to the village for teaching where I was from, where I was going. When I did not talk much she tidied the gold color decoration at her neck and started looking around. Another passenger, on the other hand, was an inquisitive, active, talkative type; he informed me that where we were going would be cold. Therefore, he had not neglected to wear rubbers on his feet and was wearing a sweater. There were eyes on me, which I was familiar with in every district, village minibus; they were curious about me and they understood right away that I was a stranger.

Just then there was a public announcement again from the district administration. A car with a certain plate number was to be moved. These public announcements were the channel by which information related to the district or the town was announced.

On the road, I saw the Chamber of Commerce advertisements that said: “To the attention of hazelnut producers ...” to call the producers not to bring their goods immediately to the market. Continuing on the road, we ascended along the asphalt roads in the stream. There were cobblestone pavements in Çatalpınar. The passengers disembarked with their sacks; their loads heavy, while the trunk of the minibus could hardly close. In Çatalpınar the road suddenly became level and when we arrived at the town square. Four to five story houses and buildings welcomed us. As in every minibus going to the village, the driver asked if anyone wanted to buy fresh bread and newspapers and stopped at a grocer’s to buy a stack of newspapers. The newspapers were brought in from the town center to the district dealer.

Continuing on the way I saw warnings about landslide terrain. Due to the

roadwork, we continued on for a time on rough roads, waiting from time to time. The driver gave the crane operator his paper while passing. Just ahead the road became normal again. We travelled along rocky, meadowland mountain chains. I was going to hazelnut villages, with elevations of 750 and above, and very far from the production center.

We came to Kabataş the road passing through the district center. There was a crowd we had not at all expected, people milling about in the main street. When I asked the driver, he said, “It’s this place’s week”; this meant that Friday through Sunday were the days of the weekly bazaar. Some of the newspapers were left in a bunch with a newspaper dealer in Kabataş. There was a dense gathering of young and unemployed people along the street who stood, chatting and looking around. Those who disembarked from the minibus and the district citizens talked about the strong rains: “It rained well in Aybastı, too. Did it also rain down there?”

We got on the road again. Not long afterwards we reached Aybastı Center. I got out at the square and asked the way to the Chamber of Agriculture. I had come with a reference from the Ordu Chamber of Agriculture They were expecting me that day.

An unemployed young population was in the majority in the region. The producer had said that they had lived on stockbreeding previously, but that the stockbreeding and highland living had come to an end. I saw that the conditions of the producers here were more difficult than those of the producers in the coastal villages near the center. One of the Chamber of Agriculture employees mentioned that “in the past, stock-breeding was 100 percent profitable; producers could sell directly to the integrated factories”. It brought to mind that stockbreeding was still

very profitable at lower altitudes. I noticed full haylofts and, by the road, a live stock exchange.

My participant observations and in-depth interviews in the villages revealed that the diversity in production and exchange conditions create different forms and strategies in overcoming uncertainty. The producers included primary producers; those who produce hazelnuts as secondary income; producers who come from urban areas during the crop season; seasonal workers; and sharecroppers.

Primary producers provide credit from their relatives who live in big cities. They also borrow money from the merchants in the exchange of their hazelnuts. The conditions were more difficult for the producers who live in high villages; and who produce hazelnut as a primary income.⁵⁰ The difficulty in production conditions became visible when observing especially the small producers.

The producers living in the high villages located in 500 meters and above, were in uncertain and difficult conditions in terms of cost of production and living. The environmental conditions in these regions were tough. It was difficult to cope with the geographic and climatic conditions to be able to sustain the agricultural production. The harvesting became challenging due to dirt roads, uphill mountains and lack of production facilities. In the high villages, the climatic conditions were harder for the producers. They had to take care of hazelnut after picking. Since hazelnuts should not get wet; before bringing to the market, hazelnuts had to be dried properly. This prevented the yield losses and product quality. Any losses in yield and quality reflected as the revenue losses.

Furthermore, I witnessed the working conditions of producers and seasonal workers as well as the relation between them. Moreover, the diversity at the local

⁵⁰ The small number of the producers produces hazelnuts as a primary income.

market was visible in the conditions of seasonal workers. The difference between seasonal workers from Georgia and the southeast part of Turkey depicted the diverse working conditions in different localities. The everyday conversations between the producers reflected the negative feelings against the seasonal workers.

Observing the everyday lives of the producers also illustrated the isolated living conditions in highland regions where the security was questioned from an outsider point of view. The family issues in H. represented how informality shaped the locality and how the producers tried to cope with the danger and threat – even coming from the family– by themselves.

More importantly, the participant observations and in-depth interviews with the producers proved the inability of the producers in coping with uncertainty. The producers were in uncertainty in terms of price information and policy changes. The position of the producers was not related to the unknowns about the amount of crop, production conditions and exchange relations. Every producer had technical and daily information on hazelnut, its condition in a given crop season and thus production and exchange conditions. In the following sections and chapters, it is revealed how the constructed uncertainty (i.e., manipulation, price instability, price speculation and rhetorical devices) contributed more to the disability of the producers.

Within the same family, the living conditions and life standards were diverse. However, hazelnut production constituted the common ground among the family members. From different background, the family members gathered in the village during the crop season for harvesting. Although the out-migration became a negative result of the decreasing hazelnut revenues, the families who continued the hazelnut

production received the financial help from the family members working in big cities. This help became the coping strategy, which did not constitute a long term strategy to sustain the hazelnut production in the region. The majority of the children do not earn their living by the hazelnut production. Their parents take care of and continue the hazelnut production. Such discrepancy makes the hazelnut production uncertain in terms of the continuation of the hazelnut production in the region.

Moreover, this section provided an understanding on how the production conditions were shaped by the relations between the merchants and producers. The producers had received loans from the merchants. The amount of loan was determined on the expected prices. If the expected prices were not realized as spot prices, the producers did not gain revenue from the hazelnut production. Therefore, the producers had become the part of uncertain nature of the price expectation. The uncertain revenue and uncertainty in next crop season disabled the producers to make plans and to think strategically.

Calculation of Hazelnuts

Agricultural production involves inevitable uncertainties and risks (Geurin and Geurin, 1994). Hardaker et al. (2004) identify two risks: business and financial. Regarding business risk, they define four types: production risk, price/market risk, institutional risk, and human/personal risk. Production risk is related to unpredictability in weather conditions or performance uncertainty in production. Price/market risk is based on the unknown prices of inputs and outputs that result in unpredictable competition. Institutions and governments also are identified as

sources of risk in terms of changes in rules. Human/personal risk is related to household production. Financial risks stem from borrowing and funding.

Even though the concepts of risk and uncertainty are used interchangeably, risk and unexpected consequences originate from uncertainties. These consequences are based on subjective (constructive, man-made) probabilities due to imperfect knowledge, misinformation, speculation and daily rhetoric about alternative outcomes and their likelihoods that create uncertainty (Botterill and Mazur, 2004; Hardaker et al., 2004). In other words, uncertainty arises from not only lack of fundamental knowledge about the issues (Paté-Cornell, 2002), but also from its manipulation and exploitation.

More specifically, three reference points need to be identified: goods, agencies and encounters. The interaction between these forms is explained as follows (Çalışkan and Callon, 2009b, p. 5):

... It is the passivity of things that transforms them into goods, and that enables agencies to form expectations, make plans, stabilize their preferences and undertake calculations. By ensuring that their qualities evolve predictably, passive goods create an environment whose stability favors organized action and establishes the possibility of entering into cooperative or competitive relationships of exchange ... The analytical framework provided by the socio-technical agencement concept enables us to take into account the diversity of the calculative equipment of agencies engaged in a market. From this point of view, controversies on calculating tools are a good entry point to understanding the development of calculative agencies.

The market is constructed through calculating and estimating processes (Beunza and Stark, 2004; Callon, 1998; Callon and Muniesa, 2005; MacKenzie, 2006). These processes have been constituted and maintained by calculative agencies as well as their specific interactions and relationships. The creation, distribution, and

maintenance of actors' calculative capacities include numerous intermediary organizations as well as their active coordination (Callon and Muniesa, 2005, p. 1235).

The production of hazelnuts, similar to that of other agricultural goods, contains risks such as climatic conditions, quality, vigor, efficiency and types of product, geographical differences and product needs (fertilizer and pesticide). These risks have a direct impact on the amount of crop that is a matter of fact for product markets. Despite the fact that all of the risks and their impacts on the production level are natural and nature-oriented factors, on the way to the crop season yet the hazelnut crop becomes a power component of the market in terms of politics in crop estimations and calculations. Every year, two times, the estimations on hazelnut production are conducted by counting hazelnuts husk, that is, bunches of three to four hazelnut kernels (Fig. 8).



Fig. 8 A hazelnut husk

Source: Mustafa Şahin, 2009.

Formal institutions produce tools for forecasting, predictions, estimation and communication (i.e., production estimation, forecasting of the amount of the hazelnut crop, supply-demand speculation, and media). They create manipulation and counterfeit controversies as well as shape the processes of their making. The speculative nature of information producing processes is related to the “selective judgment” of experts and “non-rational” factors in these processes. Therefore, communication is proposed between the agents to eliminate the risk of divergences in the “understanding and responses of the public” (Botterill and Mazur, 2004).

As such, the environmental literature on risk management, concepts of expert opinion and subjectivity are considered as variables (Morgan and Henrion, 1990, p. 102; Ansell and Wharton, 1992, p. 204). Price formation, as a communication tool based on these calculation processes is constituted by power relations on the ground (Callon and Muniesa, 2005; Çalışkan, 2010).

The Politics of Calculation

The estimation and calculating are significant parts of market formation that affect the dynamics of speculation on the amount of crop and thus supply in relation to price formation. Barry (2002) argued that calculation is not solely a technical or anti-political instrument; instead, it includes political motive, conflict disagreement. Moreover, environmental quantification and monetization are identified as highly controversial (Blok, 2011; Asdal, 2008; Miller, 2005).

The formal institutions that conduct estimations include the Provincial Directorate of Agriculture as a representative associate of the Ministry of Agriculture, the TGB, the Hazelnut Research Institute, the Chambers of Agriculture, Fiskobirlik, the Commodity Exchange, the Union of Exporters, as well as academics, and independent experts.

Until 2005, the year after the frost, each institution conducted estimation and forecasting separately. Each institution tended to manipulate the estimation of the amount of crop by calculative tools such as numbers, standards and figures, as well as by psychological and behavioral means. Institutional representatives, for instance, who supposedly defended the producer's side, attempted to decrease the figures in order to speculate for higher prices. The manipulated and speculative reports of the institutions on the amount of crop aim to have an impact on the prices and to increase the possibility of purchasing at lower prices.

A brief study of past statistics reveals how divergent and inconsistent the data and information flow are within the local market. This is also related to the identity and interest formation of the formal institutions in relation to data manipulation, misinformation or disinformation that leads to uncertainty through mistrust and hostility.

Table 6: Comparisons on the Estimated and Realized Amount of Crop

Years	Provincial Directorate of Agriculture	Variation (%)	Fiskobirlik	Variation (%)	Chambers of Agriculture	Variation (%)	Realized
1987	249,960	-11	278,000	-1	-	-	280,000
1988	367,100	-18	420,000	-7	-	-	450,000
1989	455,552	-17	450,000	-18	-	-	550,000
1990	390,815	-11	375,000	-15	-	-	440,000
1991	321,867	-23	350,000	-17	-	-	420,000
1992	540,452	-7	426,000	-27	-	-	580,000
1993	344,713	+9	290,000	-8	-	-	315,000
1994	519,669	-15	450,000	-26	-	-	610,000
1995	455,185	-18	395,745	-29	-	-	555,000
1996	456,836	-17	412,170	-25	-	-	553,000
1997	457,425	-17	399,000	-27	-	-	550,000
1998	585,446	-10	582,000	-10	-	-	650,000
1999	540,709	+5	450,000	-13	540,000	+4	517,259
2000	477,368	+11	522,000	+22	-	-	429,012
2001	682,554	+4	633,000	-3	-	-	653,946
2002	614,289	+14	617,900	+15	543,000	+1	536,627
2003	465,445	+12	400,000	-4	350,000	-16	414,806
2004	329,956	-6	358,000	+2	361,000	+3	350,039
2005	524,977	-9	483,000	-16	457,000	-21	577,351
2006	654,992	-18	-	-	-	-	803,315
2007	498,412	-10	-	-	-	-	556,350
2008	804,546	-6	-	-	-	-	854,418
2009	490,876	+11	-	-	-	-	440,413
2010	655,210	+3	-	-	-	-	637,993

Source: Fiskobirlik, Commodity Exchange and Provincial Directorates of Agriculture.⁵¹

The discrepancy in the estimated numbers illustrated in the Table 6. The positive numbers demonstrate the percentage value that the given institution estimated the

⁵¹ Provincial Directorates of Agriculture, Tarım İl Müdürlükleri, are the branches of the Ministry of Agriculture.

amount of crop higher than the realized amount of crop. On the contrary, the negative numbers in variation present the percentage value the given institution estimated the amount of crop lower than the realized amount of crop. Therefore, the negative and position numbers present the percentages deviated from the actual amount of crop. The Table 6 shows the discrepancy in estimation between the institutions. In 2003, for instance, while the Provincial Directorate of Agriculture estimation diverged by 12 percent; the Fiskobirlik's estimation diverged by -4 percent and the Chambers of Agriculture's estimation by -16 percent. The discrepancy in the estimation of the institutions created uncertainty that led to instability, speculation and manipulation.⁵²

The discrepancy in the numbers had a manipulative effect on the support purchase policies of the regulatory agencies and on the prices. This manipulation might be exemplified in relation to the case of the calculation in the Central Black Sea regions. In these regions, the problem of unregistered lands and lack of farmer registry was overcome by manipulating the estimated numbers of the amount of crop. The producers in this region have two main obstacles in hazelnut production. These are the unregistered lands and their exclusion from the support purchases and payments.

Land registry is a major problem in the central and west part of the Black Sea.

The hazelnut producers in the central and west Black Sea regions worked

⁵² Table 6 depicts the discrepancy between the estimated and the realized crop levels. The numbers of the realized amount of crop are based on the Commodity Exchanges and derived from the amount of hazelnut exported and registered by these institutions. Therefore, these numbers were taken as consistent. However, any data to be included in a panel data for an academic study need to be examined in terms of accuracy and reliability. Several market agents responsible for the data generation and mining informed me that some of these agents are offered alterations in numbers. Therefore, these numbers are included only to provide a general idea and direction about the arguments comprised in the dissertation, rather than to prove what the dissertation proposes through the exact numbers.

bottomlands that had no permits. The land was not registered in the Farmer Registry System. Since these areas were not registered, the producers could not benefit from subsidy payments.⁵³ Until 1994, the unregistered hazelnut producers were able to give their hazelnuts to Fiskobirlik, but after 1994, only the Fiskobirlik members could. Between 2006 and 2009, the TGB did not allow the purchase of hazelnuts for unregistered producers. The TGB demanded that the producers to have the Farmer Registry Document [*Çiftçi Kayıt Belgesi*].

The amount of hazelnuts to be submitted to the TGB was based on the size of the registered land and the amount of crop. This restriction based on the amount of crop was supposed to prevent the sale of hazelnuts produced in unregistered areas. For each district, the maximum amount of support purchases was determined on the basis of the estimated amount of crop for each district. Therefore, the producers in the production areas of unregistered lands were excluded from the support purchases.

When I visited the areas where the hazelnut production is not allowed in the areas with slopes less than 6 percent,⁵⁴ my impressions were significantly different from the areas where the hazelnut production is allowed. I was on the way towards the city of Samsun, in the central Black sea region. The city is an agriculture city that has a diverse geography and economic diversity, which is much different from the

⁵³ There are also non-registered lands that were registered before as forested area. Invading the forest area, the producers started hazelnut production. This case was also applicable for the east Black Sea because when looking at the high slopes it was very easy to discern the hazelnut trees cutting the mountain perpendicularly and parallel to the forest areas, again cutting the forest perpendicularly. However, the producers were always reluctant to acknowledge this situation. They demanded that the legal right of usage be transferred to them. In addition, the state was willing to sell such land to the producers for a small amount. Laws which would be enacted regarding these areas were also among the regulations which directed the voting behavior in these regions. The representatives of the Ministry of Forestry relayed the information that the land had forest area status in their reports as the result of their fieldwork. People from title deed and cadastre and from the village committee witnessing the work of these commissions complained that “the forestry people [*employees of the Ministry of Forestry*] were merciless.”

⁵⁴ With the latest regulation, enacted on February 24, 2011, the part of these areas was included in the list of permitted areas.

cities in the east Black Sea region. In approaching Samsun, I got the impression that we were approaching a big city with construction sites, tall buildings and large flat agricultural areas. The hills on the bottom land and rising towards the inland, poplars, pine trees, horticulture and arboriculture spread out before me. In addition to hazelnut factories, there were rice, cement, concrete and feed factories.⁵⁵

In the regions where the hazelnut production is not allowed, the agents who involved in the estimation studies was estimated the amount of crop to be greater. Moreover, the manipulation on the crop estimation was purported to be higher in order to increase purchase quota that will be set by TGB. With such a manipulation, the amount of support purchases determined by TGB became higher. Therefore, the producers in the unregistered lands could give hazelnuts to TGB.

⁵⁵ Towards the west of Samsun, I took part in the fieldwork of the 19 Mayıs Agriculture District Directorate. I conversed with former tobacco, now hazelnut, producers in Kuşyakası village. Village coffee houses were another area for me to meet producers. Even though I could not find the women here, it was useful for gathering information on the produce. The producers came to the coffee house in the summer evenings until late. Entering a 70-year old coffee house I found the shopkeeper and we chatted. He said the village had been crowded until the 1970s. In those years, which marked the period when urbanization started in all of Turkey, when the emigrations were added, also when workers were sent to Germany, he said that 30-40 houses emigrated. Following the tobacco quota being imposed in the recent period another part of the village people had immigrated to the big cities.

Table 7: Giresun Commodity Exchange's Comparison on the Estimated and Realized Amount of Crop

Year	Production	East Black Sea		West Black Sea		Total
		<i>Amount (kg) Shelled hazelnut</i>	%	<i>Amount (kg) Shelled hazelnut</i>	%	<i>Amount (kg) Shelled hazelnut</i>
1999	Estimated	374,783,000		165,926,000		540,709,000
	Realized	423,134,945		94,124,602		517,259,547
	Difference	-48,351,945	-11	71,801,398	76	23,449,453
2000	Estimated	275,955,000		201,413,000		477,368,000
	Realized	277,336,853		151,675,221		429,012,074
	Difference	-1,381,853	0	49,737,779	33	48,355,926
2001	Estimated	467,168,000		215,386,000		682,554,000
	Realized	490,040,692		163,906,247		653,946,939
	Difference	-22,872,692	-5	51,479,753	31	28,607,061
2002	Estimated	401,202,000		213,087,800		614,289,800
	Realized	371,875,616		164,751,562		536,627,178
	Difference	29,326,384	8	48,336,238	29	77,662,622
2003	Estimated	310,572,000		154,872,800		465,444,800
	Realized	314,345,099		100,461,586		414,806,685
	Difference	-3,773,099	-1	54,411,214	54	50,638,115
2004	Estimated	100,803,000		229,153,000		329,956,000
	Realized	122,972,925		227,066,351		350,039,276
	Difference	-22,169,925	-18	2,086,649	1	-20,083,276
2005	Estimated	374,985,000		149,992,200		524,977,200
	Realized	428,345,745		149,005,690		577,351,435
	Difference	-53,360,745	-12	986,510	1	-52,374,235
2006	Estimated	419,078,000		235,914,000		654,992,000
	Realized	541,069,836		262,245,976		803,315,812
	Difference	-121,991,836	-23	-26,331,976	-10	-148,323,812
2007	Estimated	295,237,000		203,175,000		498,412,000
	Realized	378,089,149		178,261,522		556,350,671
	Difference	-82,852,149	-22	24,913,478	14	-57,938,671
2008	Estimated	551,733,000		252,813,000		804,546,000
	Realized	605,555,848		248,862,868		854,418,716
	Difference	-53,822,848	-9	3,950,132	2	-49,872,716
2009	Estimated	291,560,000		199,316,000		490,876,000
	Realized	294,993,933		145,419,347		440,413,280

	Difference	-3,433,933	-1	53,896,653	37	50,462,720
	Estimated	407,469,000		247,078,000		654,547,000
	Realized	411,522,556		226,471,095		637,993,651
2010	Difference	-4,053,556	-1	20,606,905	9	16,553,349

Source: Commodity Exchange and Provincial Directorates of Agriculture.

The Table 7 depicts the artificially higher numbers in West Black sea. In 2003, the amount of crop was estimated higher than the realized by 54 percent. In 2009, the difference between estimated and realized was 37 percent. However, this was the year when the support purchase was removed and free market principles were initiated. Such a discrepancy also created uncertainty in price estimation. In 2009, the exporters expected lower prices; as the amount of crop was not expected to be realized that much lower than the estimated. Nevertheless, even the agents in calculation accepted that this manipulation created a position of disbelief in terms of calculated agents and formal institutions.

Uncertainty in Numbers and Estimations

The calculation of hazelnut production depends on a formula with a number of variables such as the average husk on the branches, the average number of hazelnuts in a sack, average efficiency, average number of branches and total production area. Each variable is subject to change due to its basis on individual calculation. Therefore, the uncertainty in the exact number of the production level creates discrepancies and inconsistencies in calculations and estimations.

The total production area is one of the significant variables, which makes a considerable difference in calculation. This is also related to uncertainty in

unregistered areas. On April 24, 2007 and on April 30, 2008, the Hazelnut Promotion Group with INTA Space IT Communication Inc. signed an agreement to determine the hazelnut production areas. The Hazelnut Promotion Group is a private initiative that is active in the hazelnut market in the spheres of marketing, promoting as well as policymaking and calculation.

The Hazelnut Promotion Group is made up of nine members, one of whom is from the Foreign Trade Undersecretariat and eight appointed by the boards of directors of the Black Sea Hazelnut and Products Exporters' Union and Istanbul Hazelnut and Products Exporters' Union. The first agreement included the production areas of Ordu city that encloses 6,000 km², followed by a second agreement that comprised the cities of Giresun, Samsun, Trabzon, Düzce, Sakarya, and Zonguldak for production areas of 33,206 km². The aim of these agreements has identified as the accurate and timely determination of production areas and the amount of crop on the way to be applied into the policies (Inta SpaceTurk, 2008).

The activities of the INTA Space IT Communication Inc. have been controlled and coordinated by the Ministry of Agriculture in seven cities. Based on satellite shots, data have been collected including position, area, average height, and average slope in order to acquire ortho-rectification⁵⁶ of the areas. The average numerical values per hazelnut area have been processed into polygon shape file format through attribute tables (Fig. 9 and 10).

⁵⁶ Ortho-rectification is a process to measure true distances process, which is a point-by-point correction of the scale and relief displacements normally resulting from variations (Inta SpaceTurk, 2008).



Fig. 9: Satellite image of Ordu

Source: Inta SpaceTurk, 2008.



Fig. 10: Hazelnut areas in Ordu

Source: Inta SpaceTurk, 2008.

The analyses of slope, height, and vector have been intersected with plotted hazelnut areas and, based on slope, height, and vector categorizations, total areas and hazelnut areas have been calculated in each city. Accordingly, the study aims to determine the hazelnut production areas and the areas where the hazelnut production is not permitted. In these times, the production areas that were restricted were defined as areas with slope below 6 percent and the altitude of above 750 meters. The report translates wordings of permissible and non-permissible as *legal* and *illegal* areas, respectively (Table 8 and 9).

Table 8: Permissible and Non-Permissible Hazelnut Production Areas (Hectare by City)

City	Total	Permissible (Legal)	Non-Permissible (Illegal)
Ordu	226,903	161,396	65,507
Giresun	117,800	102,385	15,415
Trabzon	59,036	51,229	7,807
Samsun	97,347	51,903	45,444
Sakarya	71,771	54,066	17,705
Zonguldak	22,039	20,076	1,963
Düzce	58,878	46,754	12,124

Source: Inta SpaceTurk, 2008.

Table 9: Non-Permissible Hazelnut Production Areas (Hectare by Type)

	Above 750 meters	Slope of below 6 percent
Ordu	54,525	12,415
Giresun	12,911	2,563
Trabzon	6,312	1,516
Samsun	4,064	41,510
Düzce	2,414	9,810
Sakarya	1,972	15,768
Zonguldak	141	1,825

Source: Inta SpaceTurk, 2008.

These indecisive plot areas have been verified in each city, yet the time period of this work seem to be too short to be able to provide accurate verification: two days of field work in Ordu, one day in each city of Trabzon, Giresun, Samsun, and a total of two days in Düzce, and Zonguldak. The report states that, “according to the field control, it is confirmed that there is not a serious problem in terms of decisive plot areas as the results of the study is confirmed with the local field studies” (Inta SpaceTurk, 2008).

Following the launch of the new regulation on hazelnuts in the summer of 2009, field studies were conducted by a joint commission of the Chamber of Agriculture and the Provincial Directorate of Agriculture, to examine the accurate determination of the so-called non-permissible areas and to research the compatibility of the measurements revealed by the satellite images with the areas concerned. Therefore, the commission visited the areas that are seen on the satellite as flat areas and thus where hazelnut production is not allowed. I joined the commission’s activities in A. district, in the west Black Sea region.⁵⁷

One of the commission members informed me that the satellite measurement is not compatible. Although the satellite images splits a single garden into permissible or non-permissible to identify the slope as less than 6 percent, the commission looks

⁵⁷ Throughout my experiences with these compatibility commissions, especially in the western Black Sea regions, it was observed that land registry is a significant problem. In the district of A., for instance, of the 190,000 hectares only 16,000 are registered, 10,000 had licenses, 130,000 were 2B areas, 18,000 were an area remaining as forest area and an area qualified as occupancy area. The producers with unregistered land do take advantage of any subsidy or support. Producers who settled this area emigrated from the east Black Sea region in the early 1900s. Apart from the coastal regions of the mid and west Black Sea, the uplands of A. brought to mind the east Black Sea, which was the traditional hazelnut region. Even so, the soil structure and the nature of the hazelnut are different. The rocky soil structure prevents the growth and productivity of hazelnut trees. The trees, which are fed from bottom water, do not grow in the rocky area and their size remains stunted. In the conversations with the producers, when I said that I believed the stunted trees had been planted later in forest areas, they insisted that the hazelnut trees in this region were stunted. Nevertheless, during the determinations the producers who said, “even the road is treasury land” revealed that forestlands are being used for agricultural production.

at the whole of the gardens. If a part of a garden is under the slope of 6 percent, the Commission looks at the whole, and identifies its slope as above 6 percent. The idea of this work is the impossibility of cultivating such a small area in a garden. Therefore, it is difficult for the Commission to eliminate the inconsistencies and to ensure uniformity.

Contacting village headmen and leading villagers made a land comparison with the parcels/plans. Even though appointments were made in some of the villages, the village headmen did not show up. This was interpreted to mean that the work was not taken seriously. We gathered at the house of a leading villager one evening. When we arrived at the house, the inclination of the area was measured and other measures were reviewed. With the Agriculture District records, the size of production and house records were examined and the comparison is made with the current title situation. They were only trying to solve the replacement of the former situation with the new situation in the best way that would cause the least damage to those producing hazelnut in non-permissible areas.

The agricultural engineer explained that accurate measurements could not be done with satellite images: “We are in conflict with the results of the satellite report; the report says there are 20,000 hectares of flat area in a given village. However, there are pieces of 500 hectares of open areas.” The engineer said that the open areas on the satellite were recorded as hazelnut production areas. In the talks the ambiguity in the measurement of the areas brought the risk along with it and the complication and uncertainty fed the production and change processes. My notes on the speeches depict how individuals as calculative agents affect the expert commission reports:⁵⁸

⁵⁸ Retrieved from the notes of the participant observations of the Commission activities. Please find the Turkish conversations among the commission members below.

- Let's show Nevzat's uncultivated land.
- What does the uncultivated area appear as?
- On the title it appears as hazelnut.
- It cannot appear as hazelnut.
- But it appears that way.
- The open area does not appear as hazelnut in the satellite.
- Do not write that place in the declaration. It is risky. You would hurt us too. It is seen clearly on the satellite.
- The lower part is 2B. I don't know when it was erected, the upper part has title, I don't know when it was erected, how so? There was an expert mistake in 1981 in the Cadastre.
- We will say 'this place is open' to those who claim it is hazelnut (Appendix, 10).

The decision was made in the group following the discussions and debates and minutes were taken with the village headman's seal and commission signature. Every person authorized on the commission signed the minutes. The open lands were determined on the parcels. However, as the measurement and information in the documents are not clear, this leads to ambiguity due to inconsistency in facts and indications as well as methodologies.

Activities of Calculative Agencies in Counting Hazelnuts

Callon, et al. (2009) identifies *secluded research* as the research conducted by specialists sheltered from the public.⁵⁹ This is a kind of research conducted by specialist and representatives. The concept is related to the distance "between the facts established by secluded research and the problems encountered by laypersons and ordinary citizens" (p. 232). This section identifies secluded research as the commission activities in counting hazelnuts. These activities are conducted by calculative agents through counting and calculating.

⁵⁹ Callon et al. (2009) argue the *research in the wild* to discuss the involvement of non-specialists and laypersons in the public inquiries and debates.

Uncertainty at this stage emerges in numbers and estimations due to the lack of communication and “collaboration between specialist and layperson” (p. 76).

Depending on the identity of a given formal institutions, the market groups enter into socio-technical controversies to affect the numbers. The technical part of the socio-technical controversies is constituted by calculation and estimation as well as pricing.

Regardless of the unregistered production areas, in the past, the crop estimations became a speculative tool on the market. Following the market crisis in 2005, it was decided to create a commission to conduct the estimation of production level. The Ministry of Agriculture appointed provincial directorate of agriculture in each county to create a commission comprised of the formal institutions. Therefore, a commission coordinated by the Provincial Directorate of Agriculture conducted the crop and cost estimations and the process started with sending an invitation letter from the Council to the institutions whose participation was on a voluntary basis.

Considering the voluntary basis, the leading actors in the market, may not have been involved in the Commission activities. Nevertheless, the voluntary nature of these commissions may not have prevented members who were unenthusiastic but appointed by their institutions to attend the commission activities. Nevertheless, each commission consisted of decidedly responsible members who led and organized the group with an aspirant approach towards counting and calculating activities.

Throughout the years, the speculation on crop estimation has affected not only purchase prices but also production and exchange relations. The influences on manipulation were dependent on the power relations within the Commission of a given city.

My participant observations during the studies of these commissions in

different cities showed several factors that influence the degree of manipulation, such as the power distribution within the commission and also between producers and business organizations, well-informed individuals, respected experts and academics. In that sense, independent experts in the commission such as academics, agricultural engineers and specialists who are against the speculative nature of such studies contribute to more objective research results.

The level of knowledge among the commission members pointed out that the power differences between the institutions. For instance, when the representative of the Commodity Exchange showed the report of the project conducted by INTA Space IT Communication on the Determination of Hazelnut Cultivation Areas and Crop Estimation, only one specialist has information about such a study and report. More importantly, the officer of Provincial Directorate of Agriculture was not informed about this project, despite the fact that the Ministry of Agriculture was one of the project partners. Since the project Report has not yet been shared by the sub-units of the Ministry, it has not been taken into consideration in the process of calculation.

In July 2009, I observed the activities of the two Commissions in two cities.⁶⁰ The Commission members usually knew each other. I became the only outsider. While I was taking my field notes at the same time as they were talking, they were joking with me on my “possible CIA duty,” “secret agent speaking Turkish very well,” or “IMF agent.” Although these are the signs of the energy and sincerity of these people, at the beginning of my fieldwork started by the Commission activities, I got the impression that the market is highly opaque. Later on, at the end of my field

⁶⁰ I had a chance to survey the landscape, villages, houses, producers, geography as well as their circle of acquaintance including merchants, factory owners, producers, etc. I was able to meet the producers all the way through the fieldwork.

work, I observed that this is the discursive construction of the market on the way to be obscure, secret and enigmatic, regardless of biases due to the lack of necessary knowledge at the very launch of my field studies.

Considering the general landscape and countryside as well as the local life around the region, it might be said that the villages at higher altitudes are less populated with a harsh geography that disables smooth transportation. In the past, the high plateaus, which are mountain pastures regularly used by the villagers in the summer time for feeding farm animals, currently are solely touristic places rather than production places due to the decreasing population. In some villages, ruined school buildings confirm a severe out-migration.

I participated in these commissions with the network references of the Chamber of Agriculture and the Commodity Exchange. These references signified the power of these institutions. In the first city, I created a network through the Chamber of Agriculture in such a way that I was introduced as a representative of the Chamber concerned. Nonetheless, my first initiative to participate in the commission activities at the reference institution, that is the Provincial Directorate of Agriculture. When I visited the Council to collect secondary data, I asked to join the commission activities. I was informed that the branch manager who was responsible for hazelnuts was on a leave of absence; hence, the assignee officer required that I obtain permission from the director, who was busy at that moment. Such bureaucratic requirements delayed my efforts in carrying out intense fieldwork. In fact, this was due to the heavy burden of state institutions in a way that at my next station, during my visit to the Chamber of Agriculture, I became a commission member in a minute.

In the second city where I was involved in calculative commissions, during my

visit to one of the Commodity Exchanges I spoke of my plan to participate in the commission activities and its fieldwork, the Secretary General of Commodity Exchange of one city informed me that they could request the necessary formal authorization from the Provincial Directorate of Agriculture. It was just a phone call to allow me to involve in the commission activities. The Secretary General, in a helpful manner, said to me that I would-be informed about the response in a couple of hours. On the same day, the Secretary General called to let me know that I had been granted permission to attend the Commission's fieldwork. What made the difference in this city was the fact that although it is not a hazelnut city like Giresun and Ordu, it is a city with a high number of larger exporters. The power configuration of institutional setting varies in different cities.

In the first city, there were eight people from the following institutions: the Provincial Directorate of Agriculture, the Hazelnut Research Institute (belonging to the Ministry of Agriculture), Fiskobirlik, the Chamber of Agriculture, the Commodity Exchange, the Exporters' Union, and the city university. At the entrance of the building of the Provincial Directorate of Agriculture, the representative of the Chamber of Agriculture met me and later introduced me to other commission members. As usual, I was asked whether I would like to drink a cup of tea. While having our tea, I introduced myself also by answering the most common question that I was asked: "where are you from?" They also advised a number of contact names that might be beneficial for my dissertation. In relation to my dissertation, I said that it was about how the market works. Then, sarcastically, they commission members replied that "it works very badly," "you're in trouble," "it's impossible to understand" [*laughing*].

Following these conversations, we got in a minibus owned by the Provincial Directorate of Agriculture and started days of fieldwork. The first impression that I had was their humorous approaches to each other mainly due to the fact that they all knew each other. They organized the general direction in a planned way due to the steep, high mountain routes in a way that one should enter at one point, ascend through the mountains and turn into the seaside.

The problems in systemizing or standardizing might be related to the deficiencies in guiding marks and directions. When we entered an orchard, the commissioners asked each other “which direction shall we say? ... Shall we take note as the place near to stone house?”, “How can we retain these places in our mind? ... Look, there is a fountain, note it down so that we can easily find this place next time.”

All the way through the fieldwork, the conversations between the members were on the routes. Which routes we should follow was discussed mostly due to the lack of sufficient directions on the roads. The routes were so complex, diverse and narrow that we deliberately followed the ones with the belief that it would be the right one and we had not have to go back again. What is interesting is that we never went in the wrong direction. During the fieldwork of both commissions, each day, we ascended the mountains in the mornings and returned on a different road to the seaside in the afternoons (Fig. 11).



Fig. 11: Landscape of a small part of hazelnut production areas in Giresun

Source: Ebru Tekin, 2009.

Before joining into the Commission activities, I had some expectations about how the estimations and forecasts should be conducted in a way that they would be a systematic on calculation based on several criteria. In fact, when I asked the names of the villages – as I assumed that they were visited on a systematic basis –, the representative of the Commodity Exchange in the first commission I was involved in criticized the lack of methodical based, for instance, in the records on rainy and sunny days and deficiencies of the selected orchards. Hence, he mentioned the necessity of marking the shrub [*ocak*, as its local expression] that had been measured for forecasting. He added that they tried to visit the same orchards each year; yet, there was no standard in altitude and direction of the orchards. Nonetheless, the general criteria were what the members desired for when they considered the

branches to be counted, “if only it would be clean, nice, full of hazelnut, endless in number.”

In the first commission, the representative of Commodity Exchange was sitting next to me in the front seat on the minibus. He directed the driver and was the most organized person in terms of statistics, numbers, figures and reports. When I asked him to share these numbers with me, he showed me the differences between the estimated and actual amount of crop in the previous years. According to his statistics, in the cities that had a Commodity Exchange, there was a large disparity between the estimated amount of crop and registered sales indicators. The Fiskobirlik representative who butted into our conversation added that one of his friends in the city in which the difference in numbers was great conducted the estimation fieldwork “hastily.”

My experience with these commissions provided me with a general introduction to the contradictions and conflicts of interests between institutions. The representatives tried to articulate their arguments mainly from the point of interest and identity of his/her institution. When, for instance, they criticized the TGB or Fiskobirlik as unwanted and failed institutions, they became pleased if the representative of one of these institutions was not there. On the contrary, when we stopped for a rest while they took a picture, the commission members also brought on jokes, like “Fiskobirlik-TGB friendship!” as a sign of the sarcastic manner toward the competitive relationship between these two. While we were making our way along the bumpy and hilly village routes, the following conversations depicted the struggle in the market:⁶¹

⁶¹ Retrieved from the notes of the participant observations of the Commission activities.

- Representative of the Chamber of Agriculture: “We organized the meeting and they earned the premiums ... We can protect the hazelnuts from insects, but cannot conserve it from the two-legged ... they exploit us [*referring to the representatives of business organizations*]”
- Representative of Commodity Exchange, [*pointing to Fiskobirlik’s representative*]: “This finished you off”
- Fiskobirlik’s representative [*reproachfully*]: “All through our field work, we’ve been fine with each other, what’s wrong now? We’ve talked with villagers, we discussed with them, learned about their political tendencies!”
- Representative of the Chamber of Agriculture: “Nobody is representing the TGB. That’s why Fiskobirlik is at ease here [*laughs, complaining about the TGB’s lack of necessary technical and local knowledge about hazelnuts*] (Appendix, 11).

All of a sudden, one of the commission members said, “Let’s count here!” The group looked at the orchards on both sides of the road and remarked that the “garden seems good ... the picture seems fine ... [*by showing a good branch that is supposed to bring more hazelnuts*] this year, the situation is complex ... this year is really troublesome and bizarre, there will be misunderstanding ... in the same tree, three to five of branches: two of them bring hazelnuts, one of them does not ... there are some on one tree, but nothing on another.” The altitude was measured to be around at approximately 90 meters.

It was said that although there were hardy, the hazelnuts seemed to drop soon before reaching maturity and thus 10-15 percent of counted hazelnuts would drop. Each commission member selected a *standard* branch that was neither too tiny nor too thick. Each of them bowed a branch and then started to count its husks. Each member declared the number he or she counted, such as 76-122-101- ... and one of the members noted the average number.

Proceeding on the journey, at altitudes around 200 meters, they decided to have a look at the orchards with the idea that the orchard was oriented toward the mountain rather than the sea as opposed to the previous one. The counting resumed,

97-90-34-125-24-36. The difference between the numbers needs to be considered.

When I asked about it, I was informed that there was no precision in counting in the orchards, one might have more, and one might have fewer husks. Abruptly, the steep roads brought us to around 400 meters. They talked with each other “here is not good ... How is it possible? ... Ooh, okay, look, here is one.” They decided to count here: 45-73-57-63-69-74.

Afterwards, they tried to remember the way they had gone the previous year. When they could not recall the road, they stopped a truck to ask. When he replied as “keep to the right,” the groups started making fun of the words of “keep to the right” in reference to the beard of the truck driver. One of them said, “In the past, someone who did not want to say ‘left,’ said ‘opposite to right.’” This was the first *left-right* discussion and the common joke encountered throughout my field study, referring to the 1980 coup as a result of which the local mechanisms been traumatically cracked.

While we were at an altitude of 690 meters, the hazelnuts were counted again. At 700 meters, yet, the hazelnuts were founded so small that they did not count. Then, we started going down a different road and they counted trees at different altitudes.

As it continued the commission’s fieldwork, the commission members talked with each other and observed the landscape. One of them mentioned that, in the past, there were more livestock in front of the houses and as such not much grass. Apart from the old and somehow abandoned buildings in the villages, we saw many of new apartments with three to four stored houses that had been built or renovated just in recent years. These new houses demonstrate the remigration of retired people from big cities and their tendency to renew their houses for the sake of the entire family as

a sign of the family-oriented rapprochement of the people from the Black Sea region. The financial resources of these renewals mostly come from post-retirement gratuity, the support of children working in regular employment, bank credits, and even credit cards. Toward the city center, the landscape changes, asphalt-paved roads emerged as well as pharmacies and gas stations.

All the way through the fieldwork, people I met including the producers, merchants, factory owners and any individual who was concerned with hazelnuts asked how the “picture” seemed that year. This was the time every individual in the market looked for any information about the amount of crop. In one of these conversations, a merchant asked the same questions and the representative of the commodity exchange replied “there are no numbers as mentioned.” Therefore, there was great uncertainty in estimating the level of crop.

The discussions on hazelnut, its problems and uncertainties were conducted in a worried, anxious and apprehensive manner. The discussions include the crop estimations of the formal institutions and the discrepancy between stock levels and figures revealed by the Commodity Exchange. The head of the region’s chamber of agriculture argued that the numbers, figures and reports could not be seen in the domestic market while the representative of the Commodity Exchange replied in a persuasive manner that “the numbers are registered on 23rd of each month” by pointing out that “the black market constitutes more than 60-70 percent of the hazelnut market.” Throughout these conversations, despite the fact that the numbers might have been over-estimated, the very problematic questions of the market may be easily disclosed, yet, only if the numbers have been daily registered at the Commodity Exchanges will the market become more transparent.

After the lunch break, we proceeded on our fieldwork again by ascending the steep mountains full of hazelnut trees. Some of the orchards that had been overgrown with tall grass had not been maintained, mainly due to, as I was informed, the fact that the orchards undergo maintenance just before harvest time. Yet, the producers who spent full-time energy on their orchards and lived in the villages or frequently visited their village houses regularly performed maintenance on their gardens. The grasses among the trees had been removed and the ground was clean; the wizened branches were put out to use as fertilizer.

The commission activities also provided an understanding of the relationships between the product and its producer. In fact, there is no organic type of relationship as is commonly observed in typical agricultural production. Not all of the producers care about their orchards in a regular and habitual manner. Besides the caring treatment, the varying weather conditions and the sorts of the land shape the quality and type of the hazelnuts. These differences shape the perception of the locals and their strategies on the product.

We continued to go up into the mountains again; the altitude was around 280 meters. During the commission activities, it was common to see the personal manipulation or a kind of psychological intention to reach the target number, which would be higher for sellers and lower for buyers. The members of these commissions were all so aware of such behavior that had become a subject of joking between the members. Throughout my experiences on these commissions, I also got involved in the counting, for instance, with the representative of Chamber of Agriculture, and we counted as 38. On the bus, everybody declared the numbers as 98-55-76-51-61 and lastly, ours, 38. The representative of the Commodity Exchange said, “You imitated

Ebru, *[laughing]*” and he replied, “I can’t count over 20 *[laughing]*”. At the next counting, the representative of chamber of agriculture again asked me to count with him but I replied that “No, I have fallen into disrepute *[laughing]*” and the Fiskobirlik’s representative said that “Look, she is leery, as she understands the issue” *[laughing]*. Such conversations gave some clues about the struggle among the institutions and their points of interests.

At an altitude of around 600, once more, we were in the orchard and I was with the representative of the Chamber of Agriculture again, yet, this time he was a little bit agitated in finding a good branch to fix his low-numbered counts. He said, “See! I can’t find” and the other members tried to find a good one. At that moment, the university professor said to the representative of the Commodity Exchange, “You found a good one.” Then, when we got on the bus, the professor informed the commission members “the aim is not to find a good brunch but only the average.” The professor also asked about the activities on cost estimations and the representative of the chamber of agriculture said, “The president of the chamber will join the commission for cost estimation.” After that, the professor complained, “these calculations do not state the truth. Last year, the efficiency was high and then the costs were low ... the Hazelnut Research Institute calculate the cost as 2.5 TL, we’ll see what will happen this year.” The uncertainty about the numbers also created distrust among the market actors.

At an altitude of around 400, we stopped for a rest in a village coffee shop. While we were waiting to drink a cup of tea, the villagers asked about us and then one of them said, “Do count properly so that the price will be high!” Later on, they started to talk about the supports, premiums and incentives that make the producers

lazy.

In the second commission activities, in a different city, when we got on the minibus, I noticed that it had a Japanese emblem on it. I was informed that the minibus has been given as a gift to the Council subsequent to a project conducted with the Japanese. In this city, which was different from the first one, given that the Chamber of Agriculture was incompetent and indifferent, the role of the Chamber in the commission replicated this characteristic due to the Chamber's low level of involvement in the activities of the commission.

Unlike the first commission, the commission members chose orchards that they had visited the previous year. They even knew the owners of the gardens somewhat and tried to recall the orchards by their owners' names. At an altitude around 300 meters, one of the members asked, "Shall we go into the orchard of Uncle Abdurrahman?" They entered the orchard and selected three sample brunches and tried to decide on an average number. The selection of brunches was made as a result of joint research by the members who showed their selections, and only the husks of the brunches that had received approval were counted. The counting was done by two or three members, who asked, "have you counted this part?" which made the counting difficult.

After the completion of the counting, the numbers were reported to the officer of the Provincial Directorate of Agriculture, who recorded them. This commission, in providing a systematic approach, as opposed to the first commission, in a given orchard, for instance, marked trees that had brunches with an average number. In the next garden, at an altitude of around 500 meters, they again entered a known orchard where it was difficult to walk around due to high grasses. The representative of

chamber of trade proposed “we could have sent a message to the village headmen just two weeks ago to have them clean up the sample gardens.”

Regarding the diverse identities and configuration of power within the commission, the independent expert on this commission possessed technical and expert knowledge. More importantly, he knew the possible legal or institutional changes earlier than the locals. When we entered into an orchard at an altitude of around 750 meters, he estimated that “this orchard is in the third category and according to Law No. 2844, these trees will be uprooted.” The Ministry would declare a month later that hazelnut trees in several categories would be uprooted; the expert had been informed about possible changes in advance.⁶²

The producers encountered during the commission activities overrated the commission activities in a way that they might also bring emotional sentiments. “Determine it well so that its price will be good,” said one of the producers who were known by the members of commissions. Nevertheless, not all producers were comfortable with the commission’s activities. When I asked one of the producers whether the orchard belonged to him or not, he shared his distrustful view: “Does it matter? It has little or no use as long as hazelnuts don’t make money” Then, he said as an aside, “They [*referring to the commission members*] do this work only to get a per diem allowance.” Such mistrust was conveyed by the producers not only toward the commission, but also toward the formal institutions. Another producer said, “you flattened the hazelnut ... Is the hazelnut so important that you count it? ... I still have not been able to pay off my debt from 2006.” This attitude proved the divergence of the producers from hazelnut and its production.

⁶² Nevertheless, the regulation has been adjusted with an exception of the areas at the altitude of 750 meters.

As such, the lack of confidence within the institutions might present one of the constituting parts of the inefficiency of these institutions in a way that the central mechanism has to perform the functions of the regional agencies. In fact, since it is difficult to accomplish both central and peripheral functions solely by the central office, the control or audit tasks might become futile.

At the end of the fieldwork, the commission members gathered at the Provincial Directorate of Agriculture to calculate and prepare the final report. Each member of the commissions submitted his or her counts to the officer, who was usually one of the commission members, to put these numbers into the formula. Due to the technical nature of these calculations; the members such as the experts and university professors were also involved in the preparation process, despite the fact that they had not been officially nominated into the commission members. However, since they were respectful and experienced into these processes, they had become a part of these activities.

When we were in the manager's room at the Provincial Directorate of Agriculture, they were discussing the problems of hazelnuts, while at the same time, the officer of the Provincial Directorate of Agriculture and the representative of the Commodity Exchange were discussing some final revisions of the draft report that had been prepared by the experts beforehand.

Interrupting the commission members on their discussions on hazelnuts, the officer started going over the report. The calculation was based on a formula to estimate the production; hence, the fixed indicators constituting the overall production were significant, such as average husks on the branches, the average number of hazelnuts in a sack, average efficiency, and average number of branches

and total production area. The commission members expressed their opinions on the numbers in calculation.

A simple discussion about calculation might be preceded as follows.⁶³ The professor found the number of 2.6 the average number of hazelnut on each husk too high and recommended 2.1. The representative of the Commodity Exchange said that 390 as the average number of branches was too high, in the old formula, which was taken as 250. He added that the average number of the branches should be at least six to eight. He continued by emphasizing that,

In calculation, 68 trees multiplied by six branches, that's equal to 390 branches, that's too much. If we take it as 300, the total crop becomes 90, which are too much. 1,025 is the number of invisible fruit. Last year, the average number of hazelnuts in a husk was 2.7; the average number of branches was 260 and the average number of hazelnuts in a sack was 600 kg. The average number of spilled hazelnut was 15 percent, that's 0.85 when we consider 10 percent at the coast, 20 percent in the middle and 25 percent in the highlands (Appendix, 12).

The the expert in the commission entered into the discussion and said, “600 (the average number of hazelnuts in a sack) might be lowered to 500. It's not suitable, in my opinion. It should be 570.” When the representative of the Exporter's Union asked “What's the average? We should take into consideration the last records”, the expert replied as follows: “We should revise these figures. Can it (the average number of hazelnuts in a husk) be 1.46?”

The discussion continued on the average number of hazelnuts in a sack that weigh one kilogram, whether it would be accepted 570 or 600. Arguing on the values on the formula, the representative of the Commodity Exchange had a discussion

⁶³ Retrieved from the notes of the participant observations of the Commission activities.

based on his notes for which he never gave up and all through these socio-technical controversies, the arguments was made using these notes. In fact, only the representative of the Commodity Exchange and the professor had any past data. The conversations among the commission members pointed out how uncertain and ambiguous the calculation process is and how individuals and their struggles with each other have shaped the calculation process.⁶⁴

- Professor: The average number I work on each year, it's not the old number, but that's based on my study.
- Expert: I believe in you, but not in it (the Hazelnut Research Institute).
- Representative of the Commodity Exchange: According to the previous year's hazelnut crop, 600 was not the right number to be included into the formula, it should have been 650; however, for the year in which I conducted my work, it is normal.
- Expert: I can obtain one kilo from 550 (amount of hazelnuts),
- Representative of the Commodity Exchange: In Tirebolu, Görele, etc. (as efficient areas) such an amount might be possible,
- Expert: In September, April, it is different by 30 percent, the kg of hazelnuts and its internal part recovers itself ... We have to follow this information,
- Representative of the Commodity Exchange: There is no systematic! [*complaining*], (Appendix, 13).

After the discussions and calculations, they decided to accept 600 as the average.

Following the average number of hazelnuts in a sack, the discussion on the number of the good hazelnuts in a husk was next. Each variable might change the result widely.

- Professor: 2.4 is the amount of the good hazelnuts in a husk, but my studies have revealed it to be 3.4. Yet, 2.4 is acceptable for me. For spilling, the estimation of 15 percent is okay. 600 for the average number of hazelnut in a sack, and the crop becomes 76,273, with the production area of 1,017,272. We increased the number of branches from 250 to 270.

⁶⁴ Retrieved from the notes of the participant observations of the Commission activities.

- Representative of the Commodity Exchange: If we calculate as 60, 6 multiplied by 6 equals 360; hence, it is 300 branches, I think 55 is low. [*55 is the number of branches that are in their mature efficiency phase*].
- Expert: We have just presumed it (Appendix, 14).

The power of institutions is based on the information and knowledge that they are aware of and the extent to which they are involved in the information producing.

During the conversations, the representative of the Commodity Exchange used the tools of this power by demonstrating the reports of INTA Space Turk, even though this report had not been submitted to the state institutions.⁶⁵

- Representative of the Commodity Exchange: There is also a difficulty in the numbers of production areas that are based on the Farmer Registry System of Provincial Directorate of Agriculture. The Ministry of Agriculture, with a private company, Inta SpaceTurk, conducted a study to determine the production areas and the total production area. If we take the official statistics, which is 100,000 hectare, instead of 117,800, which is of the report of Inta Space Turk, the crop becomes around 76,000 kg. Comparing the difference in the sizes of production areas $117 \times 76 / 100 = 8.9\text{mt}$, almost 10,000mt. Do you know the difference of 10,000mt for Giresun? It is almost the city's three-months of outflow.
- Expert: The report identifies the size of legal and illegal areas, those which are forestry area and areas below 0.6.
- Officer: According to my data, the production area is 120,720 hectares.
- Expert: That's the right one, the official one.
- Representative of the Commodity Exchange: I don't agree with you. The Ministry prepared this report, but we don't apply it,
- Officer: They should send us as well.
- Expert: Well then, they are still cynical.
- Representative of the chamber of agriculture: The report can be sent to him, but not to the branch of the Ministry. Isn't it strange?
- Representative of the Commodity Exchange: We couldn't fix the production area, we had said X but it becomes Y, and each year X becomes bigger and bigger than Y (Appendix, 15).

At the end of the meeting, the commission members decided to attach a declaratory clause to the final report in order to reveal the problematic issues. Despite the fact

⁶⁵ Retrieved from the notes of the participant observations of the Commission activities.

that they mentioned numerous problems such as the size of production areas, the counting technique and methodology, then necessity to shift the field work into three periods of calculation in April, June and post-harvest period, the need of a systematic and planned criteria in calculation, the declaratory clause, which only includes a very polite comments on the methodology, was written by the expert at the Chamber of Agriculture in my notebook. The state officers were always passive and indifferent in such discussions and challenges.

It was my impression that some of the commission members were distrustful of each other in a way that none of the estimations made by any institutions, commissions, groups (including in other countries, i.e., Georgia) were considered reliable. These agents just assume that these countries disguise their actual amount of crop. “The official numbers they reveal are not even half of the unofficial ones.”

One of the experts in the commissions stated that, “He’s just a low-level officer, how is this situation disregarded or undervalued? Can they leave a province’s harvest to a low- level officer?!” Actually, the problem about the technician concerned was about his job as a technician, but the past dilemma between the institutions and thus individuals working in these institutions. The officer of the Provincial Directorate of Agriculture, the so-called technician, had always been a bit agitated during the fieldwork of the commission, and later on I began to understand his uneasiness about the commission activities that his institution had been punished for nonfeasance. The point of claim was submitted by the Chambers of Agriculture to the Ministry of Agriculture to whom the Provincial Directorate of Agriculture was responsible. After seeing the letters written by the expert to the Ministries, I could see without doubt how they were in a constant struggle not only to fix the problems

of which they complained, but also to expand their power spheres of influence.

During the commission meeting, when it was decided to create a declaratory clause, the institutions were isolated from each other and each institution tended to put its point in instead of an integrated stance. Moreover, the institutions might prevent one another from putting the complaint first in order to be the only or the first one to express its criticism. In one of the commission, when the problems in the commission activities were discussed, the representative of the Commodity Exchange proposed to create a report including the deficiencies in these activities. Fiskobirlik's representative said, "We would create a declaratory clause for all such problems." The expert who was the member of the chamber of agriculture dominantly said, "First, we get feedback, and then you can submit a declaration."

The competition occurs not only between institutions, but also the different cities and thus geographies. These estimations are shared among countries, such as Georgia, Chile, Ukraine, Azerbaijan, Moldavia, and Argentine, yet the agencies in Turkey do not trust the indicators of these countries. The calculations might be overestimated or underestimated in the official reports of several cities. This might be understood by the difference between the estimated and actual values. In fact, overestimation and underestimation might take place intentionally as well as apart from the technical and methodological deficiencies of the calculation controversies.

During the commission activities, for instance, one of the commission members specified a city that holds out on other cities about its actual amount of crop by underestimating the amount, saying, "They hide from us the actual numbers ... they suit their numbers to their words." When I conducted my fieldwork in the city concerned, the authorized persons explained the reason for their deliberate

underestimation.⁶⁶

Despite the possibility of margin of error due to the dissimilarity among the orchards in terms of type, size, care, geography, location; the divergence between the estimated and possible actual numbers might be constituted through calculated agents as a part of the competition between them. Such activities are mostly performed for the sake of producers and to protect their interests; in fact, these might also lead to production, trade and government decisions.

Conclusion

Since 2001, the hazelnut market has undergone a rapid transformation in terms of institutions, market formation, price setting and local market dynamics. Despite the fact that this agricultural transformation began with the initiation of the neoliberal policies, the 5 April frost became the turning point in the market all the way through the market construction, in general; and the production and calculation processes, in specific. This chapter examined the constituting practices of uncertainties based on the nature of hazelnuts, social interactions, competition between agencies and their organizations, as well as power struggle among individuals and agents.

The chapter started with the story of the 2004 frost as an example of how fragile the product markets, which are vulnerable to natural crisis, have been and how the crises have shaped the market dynamics. The high prices benefited the producers in 2004; yet, the next year, as Fiskobirlik followed its habitual pricing policy based on prices higher than those of the previous years, the purchase prices were set higher than the previous year. The Fiskobirlik pricing in 2005, due to the

⁶⁶ Please see p. 169-171.

inaccurate estimation of the amount of crop, was a turning point in terms of calculation and resulted in the collapse of the local market.

This chapter provided an analysis of the production and calculation processes of hazelnuts. As such, it was the purpose of the chapter to examine the production conditions and risky nature of hazelnut production as well as to provide an understanding of the nature of hazelnuts themselves. Hazelnut production includes diversities in producers and production conditions in terms of cost, time, equipment and maintenance as well as the debt position of producers. In that sense, two types of producers are significant in terms of their positioning towards uncertainties. These are producers who produce hazelnuts as substantive farming and those who produce hazelnuts as additional income. The concept of touristic farming is associated with the producers who live in large cities other than their hazelnut city. The concept shapes the perceptions about those who produce hazelnuts as additional income and who do not provide continuous production maintenance.

A look into the production of hazelnuts provides an understanding on the changing conditions in terms of the increasing labor force and cost of labor. Those who produce hazelnuts as additional income aim to complete the picking process at the earliest possible date. Therefore, they hire picking workers. The labor cost becomes the primary cost of hazelnut production. Especially since the 2000s, the number of Kurdish seasonal workers has been increasing due to their lower salary requirements as composed of those of the local workers. Kurdish workers are perceived as outsiders and foreigners. The producers need these workers, yet do not wish to work with them. The isolation of the workers from city centers signifies the attempt to make them invisible.

The uncertainties in hazelnut production assert the lack of systemic production (i.e., the lack of knowledge in fertilization and pesticide application), the changing costs of hazelnuts and the lack of mechanization. More importantly, the politics in calculative and pricing processes make the producers disabled in overcoming the radical uncertainties.

The calculative agencies pursue the interests of the groups that they support, either producer or business groups. The manipulative and speculative actions, the perception of calculative agencies and their subjective valuations result in constructed uncertainties. For years, the calculation processes have been tools for speculation and bargaining between institutions. The decision makers are manipulated and confused by the speculations on crop estimations that have an effect on the handling of price differences. The impacts of these effects will be discussed in the following chapters.

Agencies who acquire data, information and knowledge might hold instrumental and manipulative power (i.e., through calculations, counting and negotiations). They delimited with official numbers and established norms, principles and practices. Imperfect knowledge, misinformation, speculation and daily rhetoric about alternative outcomes and its likelihoods create uncertainty. Therefore, uncertainty is not only the lack of fundamental knowledge about the issues (Paté-Cornell, 2002), but also its manipulation and exploitation. Manipulation and knowledge producing are the power tools of institutions. The calculation process revealed the mistrust of institutions toward each other. Also, it was observed how manipulative the numbers and the estimations were, which depicted their vulnerability to speculation and misinformation. The multiplicity of data that each

market actor possesses points out the lack of collaboration between specialists and laypersons also among specialists. As the multiplicity of data reveals controversies, the collaboration necessitates a collective learning and experimentation.

Marris (1996) identifies “politics of uncertainty” in terms of its management by individual endeavor. More importantly, he writes, “... because the power to control uncertainty is very unequally distributed, the greatest burden of uncertainties tends to fall on the weakest.” Similarly, Marris (1996) identifies such interference as “the ability to maneuver in the face of uncertainties often at the expense of others whose power is less” (p. 1). In light of these explanations, this chapter identified the “weakest part” as the producers, who do not have the ability to “maneuver in the face of uncertainties” (p. 1), as well as the powerful part as the calculative agencies. However, the position of the weak producers is not related to the lack of means of production, but to the lack of ability to “control over contingencies rather than the control over resources” (p. 1).

This chapter probed three reference points: goods, agencies and encounters. These points were examined in terms of the production of hazelnuts, their calculation and their calculative agents. In these processes, although radical uncertainties prevail, the producers have difficulties to overcome constructed uncertainties when the market groups come into the stage. The production, estimation, counting and calculation are significant parts of market formation that affect the dynamics of speculation on the amount of crop and thus supply in relation to price formation. The analysis of the production of material things with their calculation process reveals that the market analysis does not include the production and circulation of commodities alone. Rather, it is the production and circulation of uncertainties via

material things, and numbers and manipulations by the calculative agents. Therefore, for chasing uncertainties, it is necessary to examine more spheres of the market constitution. As the production and calculation cannot be detached from pricing, circulating and exchange how the market is maintained and how prices are created need to be understood. Therefore, two more reference points emerge: market maintenance and prices. The following chapters examine these market encounters.

CHAPTER 4

LOCAL EXCHANGE IN THE HAZELNUT MARKET

Production and exchange in the market making process are closely interrelated in terms of informal institutions in this chapter. In the literature, informal institutions have been analyzed in relation to “the lack of clear rules” (Helmke and Levitsky, 2004), “*de facto* enforcement of unwritten rules”, “personal networks” (Wang, 2000; Borocz, 2000) and “traditional culture” (Dia, 1996; Galvan, 2002). The definition of Helmke and Levitsky (2004), with a political focus, refers to informal institutions “as socially shared rules, usually unwritten, that are created, communicated, and enforced outside of officially sanctioned channels” (p. 727).

The dissertation adopts the features of informal institutions identified by Hyden (2006). First, charisma constitutes an authority relationship based on personal trust. The trust relations are based on authority and charisma of the powerful agent (i.e., between importer and exporter; between exporter and intermediary). The chapter provides an understanding on the change in the trust relations in terms of the changing market dynamics.

Second, pooling is related to horizontal exchanges within small groups. The hazelnut exchange between producers and intermediaries (i.e., grocers, merchants, traders) involves a constant face-to-face interaction and non-contractual relations. The pooling also refers to the aggregation of these relations that ensure the maintenance of the market through the accumulation of hazelnut supply. Pooling ensures the product delivery of the exporters to the importers on the agreed time.

However, this is not just a commercial motive that aims the dedicated service; rather, it is related to the maintenance of the market and informal network at the same time.

Third, this maintenance is ensured by means of collective self-defense. This is related to the development of shared norms of sovereignty and non-interference in informal institutions. Such a defense mechanism is executed by the informal institutions, which is created independent from the formal institutions. Therefore, this analysis rejects the argument that informal institutions need the enforcement of formal institutions through authority contracts. The competitive interaction is derived from this defense mechanism, which resist the creation of new formal institutions (i.e., commodity exchange, license warehouse). The chapter analyzes these constitutive and changing dynamics of informal institutions within the sphere of local exchange in the hazelnut market.

Informal institutions in the hazelnut market are conceptualized by reciprocal exchanges through unwritten contracts. The hazelnut market is constituted and maintained through these reciprocity relationships. In that sense, grocers, merchants, factory owners, crackers, intermediaries, brokers and exporters create exchange networks. Trust is generated through the network leader, which may be defined as the ability to create, manage and maintain exchange networks.

The informal characteristics of the exchange mechanism in the hazelnut market include buying-selling procedures and informal debt relations. The local market exchange does not include written official certification, which is not recorded as a formal document by law. Market actors are agreed between the parties as verbal promises. In fact, because of liberalization and commercialization, these relations have been changing in terms of production and exchange conditions. This chapter

analyzes buying and selling (give-and-take) relations in the hazelnut market and how informal institutions, exchange relations and local network through flexible debt relations maintain the local market.

This chapter probes how hazelnuts are bought and sold in the market, on the ground, and how informal institutions contribute to the market maintenance. This chapter also identifies local market actors involved in buying-selling and exchange of hazelnut.

The contribution of this chapter to this literature is the implications of the informal institutions and the interaction between formal and informal institutions. What this chapter reveals in terms of debt relations is that market maintenance is constituted through informal debt and network relations between the market actors. These informal institutions secure market maintenance. Market maintenance is required due to information asymmetries, transaction costs, networks, informal credit sources and linkages. In fact, the change in the market also transforms roles, functions and capabilities of the local actors within the social ties. The relationships at the local hazelnut market are constituted by trusting partnerships, long-term relationships, and friendships as well as informal patterns of reciprocal obligations (Lorenz, 1992). However, trust takes different shapes in each exchange and transaction.

The chapter analyzes the relationships between producers and intermediaries by examining debt-credit relations. In light of the exchange relations, it includes discussions on profit margins, the factors of hazelnut exchange and different aspects of exchange relations (i.e., leave hazelnuts for *emanet*).⁶⁷ The chapter also depicts the

⁶⁷ *Emanet* is a kind of exchange between producer and merchant. The exchange starts when producers leave their hazelnuts with a merchant for safekeeping until the time of sale. The exchange completes at the time of sale when producers take their hazelnuts out of safekeeping and sell to the merchant.

diverse nature of the local market settings and tradition in different hazelnut production regions and how locality shapes the vocabulary and structure of local exchange relations.

The chapter, which begins with an introduction on actors of the local market as well as their interactions and functions, intends to provide an understanding of network and exchange relations between market actors. Therefore, it provides insight into informal institutions with an analysis of the debt-credit relations between local market actors, namely producers, intermediaries, merchants, grocers, factory owners and exporters. As the market has changed over time, this chapter examines the dynamics of the changes and how they have shaped these networks and informal institutions as well as the competitive interaction between formal and informal institutions.

Actors of the Local Market

The local market actors who buy, sell and exchange hazelnuts include producers, intermediaries, merchants, grocers, crackers and exporters, the TGB on behalf of the state as well as Fiskobirlik. Usually, producers sell their products to merchants or grocers with whom they have worked with for years. Producers rarely sell their products directly to exporters. Grocers (*manav*) and merchants are intermediaries who only buy hazelnuts, store them and sell to factory owners or exporters. The relationship between market actors is based on the chain of debt. Each actor of the debt relations is dependent on the others so much so that if one of the parts fails to pay his debts, the other parts of the chain also are affected.

At the local level, there are intermediaries who buy hazelnuts from producers and sell to factory owners or exporters. The intermediaries might be identified as three groups, grocers, merchants and crackers. These actors constitute buying, selling and debt/borrowing relations as informal institutions that ensure the maintenance of the local market. The common characteristic of these intermediaries is that they remain separated from daily price formation processes. Intermediaries at the local level who do not make any exports become disconnected from price making processes.

The concepts of grocer and merchant have been used interchangeably. Although the activities of grocer and merchant are similar and they both buy and sell hazelnuts, they are dissimilar in debt and borrowing activities. While the grocer's relations with producers include buying, selling and borrowing [*ödünç*], for merchants, the concept of debt [*borç*] gains functionality in parallel to market logic.

In the local market, while a grocer, or *manav*, generally is known for selling fruit and vegetables in other regions of Turkey, the grocers in the hazelnut market only buy and sell hazelnut. As for the central and west Black Sea regions, grocers are called cereal sellers. As compared to the hazelnut areas of Ordu and Giresun, when I visited the central and west Black Sea regions where hazelnut cultivation became widespread following the 1980s, the vocabulary of the market concepts changed. When I asked about grocers or merchants in these regions, the local people did not understand what I meant; then I realized that they called them cereal sellers. However, recently, these cereal sellers, as intermediaries, also engage into the hazelnut business.⁶⁸

⁶⁸ The dissertation identifies these merchants and grocers at the local market as intermediaries in order to eliminate any confusion in concepts, by keeping in mind the difference between merchants and grocers.

Moreover, these differences reflect the fact that each local hazelnut market has a different configuration of market making. In light of these differences, I noticed that even the constitution, structure and content of each local market varied in terms of background, local market vocabulary for daily concepts, perceptions and relations. This difference in definition was based on the different backgrounds of the central and west Black Sea regions where rice and cereal as well as vegetable have been produced.

Hazelnut merchants can be found in every corner in hazelnut cities and districts. I was able to establish contact with many of these merchants face-to-face, one by one. The doors of their stores were always open, and thus I was able to go inside, introduce myself and ask questions. Their contacts cannot be reached through any websites via Internet. I had the opportunity to meet numerous merchants during the course of this dissertation. I was able to examine the information they shared with me, as I also met merchants who gave me unclear answers, or even false information.

Crackers might be considered a kind of bourgeoisie in the market. The crackers consist of both a store office and factory. Although they have old types of store offices, their profit margins are higher as they process hazelnuts in their factories. Furthermore, the difference of crackers is also derived from other aspects in terms of their appearance, such as how they dress and their living standards. The crackers are also different from the integrated hazelnut factories that provide calibration, classification and systematic measurements to prepare hazelnuts for export.

Merchants are most likely to lack powerful positions in the market not only in information creation but also information flow. During my interviews with them, merchants acquired specific information even from me based on my field notes in

terms of the market or crop or general conditions. Although merchants do not have a direct impact on price formation, their roles in the market affect prices indirectly, for instance, through stock management, leave hazelnuts for *emanet*, and procurement processes. Therefore, they are a part of price formation and the information flow.

Local Networks and Market Maintenance

This section focuses on local networks to maintain the market and to alleviate risks and uncertainties. The networks include exporters, factory owners/crackers, processors, grocers, merchants and producers. The big players in these networks are exporters and their dependents are factory owners, crackers and processors. Although exporters also possess large factories, factory owners are mostly signified as crackers in the local market. The difference between factory owners and exporters is that exporters have more developed external trade relations and integrated factories. The hazelnut market is constructed on the basis of a system in which exporters, intermediaries and producers create a network type of relationship. The network relations are constituted on debt relations and the flow of price information.

The networks are maintained through debt relationships in order to assure that the debtors will bring their products to the moneylender. The debt relationship has two roles, which are moneylenders and borrowers in two ways, between producers and merchants, and between merchants and exporters. Merchants may provide credit from factory owners or exporters with the idea that merchants collect product and thus guarantee supply and stock for the exporters. In the local market, such relationship is described as “merchants collect product on behalf of exporters”, yet it

is not a strictly binding relationship for merchants. In the case of the fulfillment of product delivery in the exchange of the credit level, merchants also can sell product to other market actors.⁶⁹

On the ground, although the market actors mentioned that the debt relationship is based on trust relations, yet it is the trust that is subject to each transaction. If any given actor does not fulfill the promise, he cannot do business again. The buyers or creditors manage the trust relation. Since the debtor knows the importance of the business relations with the big exporters and that they cannot earn money otherwise, they strive to maintain their good reputations. Nevertheless, the very beginning of the debt relationship between exporters and their network participants starts on the basis of risks taken by the exporters. In that sense, trust is not an endless trust that is ensured thoroughly. An exporter, in the first transaction, may start a business relationship with a cracker without ensuring the result of this transaction. Therefore, the concept of trust becomes a kind of chance and hazard. The behavior of exporter is related to trust and power building through charisma by a reciprocal relation. A material gift is provided in exchange of a social gift in this kind of reciprocity. Nevertheless, trust becomes a commodity in this shift.

The positions taken by the exporters depend on a chain system that links them with merchants. There is always vivacity among these local powers in terms of knowledge sharing and information dispersion. The market creates the network and this network shapes the market. Throughout the flow of information, uncertainties also may be produced and distributed through these networks. Nevertheless, networking as risk alleviation results also in uncertainties in terms of information

⁶⁹ According to the interviews with the merchants, they usually sell two-thirds of their stock to one of the network participants and one-third of it to others.

flow and production. Therefore, the network relations of exporters shape their risk behaviors in a way that they create links not only to control risks, but also to control networks.

When borrowing from the grocer or broker, the producers can also sell their products to another. The big exporters used to give money to the grocers, for example, 100,000 TL. The grocers would distribute this 5-10-20 to the villager. The villager finished the trust in the emanet system. He started to give not to the grocer, the merchant he promised to, but to another (Appendix, 16).

Within the network, actors seek to secure themselves. Each network is created and maintained by an exporter or a group of exporters. The actors of a network do not enter in a contractual relationship; hence, they are involved in a compulsory hazelnut loading and delivery. The promises are made without any written contract between the local network actors. The price information is conveyed through text messaging via mobile phones from the east to the west of the region. Each actor within the network can be immediately informed about the prices. The price information comes from the leading exporter of a given network. The largest network is created by the largest exporter.

When I asked local merchants about how prices are formed, they avoided revealing any details about the network leader who might be an exporter or a cracker. A merchant replied that “You, me, we don’t have a chance to determine. There are big merchants.” The price given by the exporter to other network participants is higher than the market price and guarantees the purchase of the promised amount. The exporters and big factory owners inform their network participants. Despite the fact that these locals do not organically depend on these factories, they mostly run

their businesses by means of their regular purchases.

An exporter provides cash for other network participants in advance while expecting product return in exchange in the following season and takes risk. Exporters purchase products from factory owners or merchants with the aim to control risk. The exporters with their networks also can manipulate prices. If the daily price is 3.05 TL, for instance, an exporter can give a price of 3.10 TL to the intermediaries. The deal is based on the oral promise that the exporter will purchase the product through an intermediary.

The Profit Margins of Hazelnut Merchants

The hazelnut stocks have always been a source for cash return. The profit of merchants may also come from their hazelnut stock management. If the hazelnut price rises, they sell hazelnuts. If the prices fall, they stock hazelnuts at lower prices. The merchants generate revenues from the interest payments.

Also, the uncertainty in the measurement of the yield level [*randıman*]⁷⁰ is another source of revenue. As an agricultural product, hazelnuts are subject to yield throughout complex production pricing, exchange and distribution relations. The product price is determined on the basis of the yield level in a way that the product price is declared for the yield of 50. Therefore, the price level is positively correlated with yield level. The merchants generally quantify the yield level manually instead of by means of improved mechanical calculation. Producers prefer not to let the merchants measure the yield if their products are with at the low level of yield. Such

⁷⁰ The price levels are determined for 1 kg of unshelled hazelnuts with the yield of 50. The yield calculation is made by a visual inspection with a sack of product to see the yield level whether at higher or lower than 50 percent. Any price in the market is declared at the yield level of 50 over 100.

a situation is also related to the untreated relationships between producers and merchants throughout the years. Producers who have created habitual, immediacy and convention with their merchants hesitate to create similar relationships with exporters. Therefore, uncertainty and inaccuracy (i.e., approximate measurement of yield or unmeasured yield and daily credit usage) maintain the steady relations between producers and merchants.

In most of the cases, merchants do not measure yield; they roughly determine its level and this has a direct impact on prices. Throughout the region, the yield level varies from the coastal to the inland areas. One of the merchants, for instance, explained the yield generalization as follows:

Around these regions, the yield is around 57-58, which is high and that's why producers in these regions do not sell without calculating yield. In these regions where the yield level is low, no yield calculation is made. One level of yield from each sack goes to tax. But, you don't say it to producers. Ok? Generally, the yield levels are around 52-53 here. It is not good for the producers to measure yield. We know everybody. We give cash to producer in exchange for hazelnuts (Appendix, 17).

According to the price of any year, the yield of 50 corresponds to the price of one kilo of unshelled hazelnuts. It is known that hazelnuts under the yield of 48 have low economic value. The real value is in the yield of 50 and above. The measurement of yield is not based on systematic or scientific calculations. Each merchant has an idea of the general level for each hazelnut district and village. The buyer takes a handful of hazelnuts and determines its level of yield manually. Although merchants have a simple machine that measures yield, not every hazelnut merchant uses this machine, and not all of them even measure yield. In addition, measurement is not even consistent from one purchase to the next.

Considering buying and selling of hazelnuts in mt, the difference between one yield and two yield levels means a remarkable profit share for hazelnut merchants. Yield is the basis of the profit of intermediaries. Merchants measure yield manually and recognize the technical specifications of hazelnuts coming from different villages at different yield levels. Even if a buyer knows, for instance, that a certain village produces the yield of 52, he might tell the producer that he will pay 51 or 50 yield. The difference of one or two yield will automatically turn into profit for the merchant.

Furthermore, in each hazelnut exchange, when for instance merchants sell hazelnuts to factories or exporters, *yield* to measure becomes another derivative factor of profit in exchange. The measurement becomes a tool for intermediaries to overcome uncertainties. More importantly, the market is constituted through uncertainties in yield measurement that makes the informal institutions viable. There is no standard in the measurement of the exact level of yield, and there is no classification of hazelnuts according to the level of yield. Therefore, the one or two point difference in yield, in exchange with the factories and exporters generates a considerable amount of profit. In the same marketplace, while one merchant takes the yield of a given product at 45, another may take it at 50. There is no rationale in price determination according to the level of yield. If yield is high, merchants tend to offer an approximate price instead of measuring it in order to create profit. Even though yield is effective in pricing, the ambiguity in its measurement is a factor that damages the good relations between the producer and the merchants.

If the daily price of 3.60 TL, for instance, is determined for the yield level of 50 over 100. The price for each one yield becomes $3.60/50= 0.072$ TL. A merchant

may buy products (with the yield of 52) at the yield of 51 and sell it at 55. Hence, the difference between the yield levels of 51 and 55, which is 0.288 TL, becomes the gain of the merchant per kilogram (Table 10).

Table 10: An Example of Merchants Gain Based on Yield

Daily Price (50 yield over 100)	3.60 TL
Price per yield	$3.60 \text{ TL} / 50 = 0.072 \text{ TL}$
Buy at 51	$0.072 \times 51 = 3.672 \text{ TL}$
Sell at 55	$0.072 \times 55 = 3.960 \text{ TL}$
Difference / Gain	$3.960 - 3.672 = 0.288 \text{ TL}$

In a given region, a merchant calculates the approximate level on the basis of the region's productivity (yield). Therefore, the lack of accuracy in yield levels creates a situation in which merchants purchase product at levels of low yield and sell to exporters at accurate levels (probably at higher levels).

The Informal Debt Relations between Hazelnut Producers and Merchants

In the literature, debt relations in primitive product markets have been analyzed in relation to substantive economies, as a reference to Polanyi (1944). The fact that the daily language varies in the hazelnut regions also reflects the diversity of forming the market in the locality. For instance, in the west Black Sea region, the term for "accommodation check" (*hatır çeki*) is used to express borrowing and debt. While in Giresun this is related to loan (*ödüncü*), in Ordu and the central Black Sea region, however, it is called debt (*borç*), with a market-oriented meaning that is also subject

to interest rate. Therefore, the economic action does not generate a universal behavior applied in every market. Instead, each locality has its own agents with unique type of interactions.

An anthropological account to market studies refers to the informal character of these relations in terms of unwritten rules or “promissory notes” (Rifkin, 2008, p. 52). In the hazelnut market, the difference between loan and debt is related to the concept of credit. The relations of merchants with producers include debt and borrowing, yet the types of payments vary in terms of charging interest rates. Although the network participants engaged in a debt and exchange relationship do not admit that they apply interest to the amount of debt, the interest is applied in different ways, such as through mortgage liens, the exchange rate or last year’s closing prices or the price at the day of debt receipt, as well as by cutting the yield levels or by increasing the amount of product or by applying direct interest at the time of the closing of account.

The charging of interest depends on the type of the local market and the relations between producers and merchants. If relations between merchants and producers are structured through merely give and take relations with logic of *ödünç* (borrowing), merchants provide short-term loans. On the contrary, if these relations are based on more buying and selling relations, the direct interests are applied to *borç* (debt/credit). In both cases, some merchants may tend to disguise their borrowing and/or debt activities.

First, considering the borrowing (*ödünç*) logic, merchants provide cash for producers who live in the same village; or they are relatives for a short period of time, like one or two months. The producers to whom the merchants give money

may be their fellow villagers, friends or relatives. Merchants work with the same producers and thus know about them. One of the brokers said, “The relationship between the merchant and the producer is [*like*] a marriage”. Nevertheless, the merchants know all of the data and information about the debtor producers and their hazelnuts such as the level of yield, product quality, production level and conditions, their living standards and even their family members.

These relationships, however, do not present a homogenous pattern across the regions. In the central Black Sea region, due to the product diversity with large and fertile production areas and warm climate, the merchants stock not only hazelnuts, but other products as well. Merchants in this region are called *zahireci* in the marketplace, a word that originally meant cereal grocery. The relationships between producers and merchants are more recurrent and normalized in daily life. More importantly, merchants are in a position to treat the producers as customers. They mention that “producers want to talk with you in a friendly manner; if you treat them badly, they don’t come to you.” Therefore, the merchants, in this region, become more dependent on producers and the relationship between them is shaped by the continuance/survival of these merchants on the customer satisfaction to be able to secure hazelnut supply to be provided to the exporter.

A trader explaining his acquaintance relations said that he gave money to his *special* customers without interest. Nevertheless, in the times of low hazelnut prices, the merchants apply interest rates even to the debts of these special producers. He had approximately 100 customers and he lent money to the ones who were in urgent

need of money to take care of things like health problems, or funerals; and to the ones he trusted. He described his relations with his customers as follows:⁷¹

We have been doing this business for 38 years. We have a great circle. The quantities I lend differ, it may be 100 TL, and it may be bonded debt amounting to 5,000 TL. No interest. Today 4 TL, tomorrow also 4 TL. All the money I have lent has been returned, except for a single 100 TL. I know them [*the debtor producer*]. I lend money to the ones who are in my circle. Anybody who goes wrong with me can't come to my office. Sell your [*debtor's*] cow and pay me money! Last year, hazelnuts were cheap, and people (merchants) lent with interest. But many of them have not been able to pay back (Appendix, 18).

Second, merchants who engage in debt relations with producers with whom they are not acquainted may apply systematic and market rules towards these producers. By doing this, merchants aim to ensure the arrival of the product and to supply the amount of hazelnuts promised to the factories or merchants and to protect their position within the chain of factory/industry/merchant. Nevertheless, there is no standard of any of the merchant interaction with producers. Although each merchant may apply different practices, most of the merchants do not wish to reveal the details and conditions of the debt relations in which they are engaged with producers.

I also found several opportunities to have frequent talks with crackers. In one of these crackers, I met the son of the factory owner. His family had been involved in the hazelnut business for three generations. He had recently graduated from an expensive private university in Istanbul and began to head the cracking factory of his father. Together with his assistant manager, they tried to help me reach producers. During our conversations, as producers brought in the hazelnuts, they had their busiest time. Their factory was located near the high-ceilinged shop where they

⁷¹ Retrieved from notes of in-depth interviews.

bought hazelnuts. This was a very old cracking factory located at the very center of the city.

They had continuous relations with their loyal customers: “There are cases in which we lend money for fertilizer, labor costs, etc., as we know that they will bring the hazelnuts to us anyway. I lend money to people who have been my customers for 20-30 years, since I’m sure that they will bring their hazelnuts.” The point at which merchants who own crackers differ from other merchants is that they are able to sell hazelnuts at higher prices. Since they engage into first-hand purchases, they can afford to keep their prices high for direct transport to their own factories without any transaction costs. The aforementioned young factory owner explained this price difference in following words: “Last week, we bought hazelnuts at 4 TL, when they were actually 3.8 TL. The factory is right here; instead of giving it to the grocer, we kept it for us.”

Buying and selling relations are trust relations based on quality of product, delivery time and reliance on payment terms. A trader described his acquaintance relationship with the producer and fabricator, as follows: “I buy (hazelnuts) from Gurgentepe, from Yukarıkiraz, I don’t buy from K. (name of village) - they aren’t loyal or trustworthy guys. If someone comes and (recommends) a customer to me, telling me he is good, trustworthy, I give (money).”⁷²

With regard to debt relations, when the merchants were asked about interest rates charged to debt payments, most of them said that they did not charge any interest rates. The price level also affected the interest application. The low level of prices led to the increase in the interest rates. Even the producers said that they borrowed money without any interest. Some merchants said that they conducted

⁷² Retrieved from tape-records of in-depth interviews.

totally interest-free business. There is a general idea about the merchants who are called “hajji merchants”⁷³ in the market. I saw how certain merchants – even though they were not called hajjis – expressed regret about their previous interest incomes.

One merchant said,⁷⁴

I’m 45 years old. Until today, I have made huge earnings from interest. But now, I have devoted myself to devoutness, because I have understood that I have committed a huge sin. I don’t work anymore with interest. We charge 2 percent from the factory and from the bank. We try not to exceed the bank rate that is around 2-2.5 percent. I will put an end to this business, too. There will be no interest from now on. I will suspend debts. I’ve understood that it brings no benediction. I have learned that it (interest) is a major sin in the eyes of Allah. It begins with [*the price of*] 5 TL, gets the money for 2 TL; sells it to villagers for 5-7 TL ... I have 150 customers. Those (bankrupted merchants) were my colleagues. They borrowed money from factory owners. The producer was not able to repay the debt ... We bought hazelnuts from high land villages, but we couldn’t sell them. Nothing happens to factory owners, it’s us, and producers, who have to suffer everything. (The TGB) would have relieved both us and producers if the TGB buys this year again (Appendix, 19).

The pejorative opinions about merchants who charge high interest rates are derived from the experiences of producers with pawnbrokers. They are usurers who sell cash to producers at high rates of interest. Those who earn money out of money through high interest rates have generated remarkable profits. However, due to the crises and speculations that the market has undergone, these merchants have not been able to retrieve their debt payments. The change reflects itself merely in that they abandoned usury and start charging interest rates are closer to bank rate or at relatively lower interest rates. Therefore, this regret of producers and merchants is derived from the negative opinions about merchants in the local market.

⁷³ Hajji merchants are those who are positioned themselves against the interest charging over the loans. The interest is *haram* for a Muslim.

⁷⁴ Retrieved from tape-records of in-depth interviews.

Nevertheless, this does not mean that they do not charge interest on payments to producers. The so-called lent money without interests is covered with other side payments if not interest. These interests may be charged indirectly by adding in prospective debts or by charging through cutting in prices based on yield. Also, this interest may be charged either through exchange differences in case of interests payable in foreign exchange. A cracker explained the borrowing relationship with producers and how they determined the amount of debt as follows:⁷⁵

There's nothing such as 'I can't sell it'; hazelnuts can be turned into money right away. We apply an interest rate that is slightly higher than the bank rate. We lent money at rates of 3-4 percent or lent money in dollars and took it back in dollars. Similarly, we gave Euros and took Euros. But, there is no logic in that anymore. We can't take back what we give. I think that a more peaceful environment will emerge if no money is lent. ... We have receivables of 40 percent. We lent money for the half of the amount of hazelnuts that the producer can bring. For instance, if this amount is 5mt, we multiply it with its daily price and lend the half of it. If the producer demands more, a security is demanded, like an asset, depending on the producer's financial power. If we know the producer in person and if the producer has a guarantor, we book the debt by word of mouth. We refuse to lend money if we think that problems might arise. But if we know and trust the producer, it is okay. Otherwise they have to provide security or real estate properties. Banks grant agricultural loans, too. But banks lend money in return for mortgage if we don't lend any. If the producers come from the same village, we agree to lend; or if they stand guarantor with for their acquaintances from neighboring villages and vice versa, but we don't lend money to anybody that we don't know. But, there is no logic in that anymore, either (Appendix, 20).

Although indebted producers submit their hazelnuts to their merchants, in some cases, they may give their hazelnuts to exporters at a relatively higher price.

However, they are bound to the merchants to whom they are indebted and the merchants pursue their debt payments. Therefore, merchants consult with each other

⁷⁵ Retrieved from tape-records of in-depth interviews.

in terms of producer's payment conditions to secure the delivery of hazelnuts on time.

We lend money to persons I know, as allowance. As for the interest, it doesn't exceed the interest of Ziraat Bank. We know at which village it is produced at what quantity of hazelnuts. We are also swindled. Every year, this (swindle) increases. If there is no crop [*small amount of crop*], you make it wait. When there is crop, it is subject to interest, follow-up and bond. We are under the obligation to collect our receivables at the end of the year, but there are some merchants who cannot collect. The receivables shall be collected on July 15. For example, yesterday a producer came and said she had hazelnuts, but did not want to tell anybody (Appendix, 21).

The merchants said that the producers generally come for a loan toward the crop season and especially during the month of May. The borrowing periods shortened especially after the 2004 frost, and the hazelnut loading period shifted to the month of July. One of the merchants explained his debt relationship with the producers as follows:⁷⁶

Everybody has a merchant. No one questions the interest rates. Merchants have written open bills for years. In 2004, merchants take 6 TL to 7 TL and they could write off their debts, so. Even though the loans of private banks were higher than those of the Ziraat Bank, there were also pawnbrokers, who just sold money (by charging huge interest rates). Many people have suffered dearly. Three years ago, a father and a son, who are merchants, were shot in Ulubey. Now, I have been in the hazelnut business for many years, there is so much that comes into my mind when I look back. Hazelnuts generate high profit margin. Merchants know how much hazelnut producers have, and determine the amounts of money to be borrowed accordingly (Appendix, 22).

Nevertheless, producers may ask for cash not only near the crop season but also in all periods of the year. A producer can simply come into the merchant's office to ask for cash and they ask for more with marked composure if the given amount is not

⁷⁶ Retrieved from tape-records of in-depth interviews.

sufficient for them. In response, the merchant may accept this request. In numerous conversations that I witnessed, the producers asked the merchants for cash money in exchange for hazelnuts. This situation indicates the uncertain and flexible positions of producers in terms of their means of living. The frequent request for cash money becomes a kind of giving daily pocket money (*harçlık*). The producers become dependent on the small amount of money as a means of subsistence.

Producers who do not have stable incomes continuously borrow from their merchants. These producers do not also have health insurance. Again, one day, in one of those grocers' stores having, like many others, which had a quite historic appearance, I witnessed a merchant getting into trouble due to the money he had lent. I went in while he was sitting in his store along with his son. He was talking about how merchants had gone bankrupt during the previous years.⁷⁷

I've been in this sector for 21 years. It is now since years that I came here; I have never become indebted to the factory. I am also doing coal and construction businesses. The decrease of the hazelnut price, from 4.2 TL to below 4 TL, make me and the producers all tuckered out. I initiated no legal action to collect my debt from the producers. They failed to pay their debts. For instance, let us take a look at some due dates [*he opened his book of debts*]. Look, here is one who borrowed money in November right after the end of harvest, when he actually should have had money ... We won't leave our customers in the lurch in times of weddings, illness, and funerals. The most intensive [*borrowing*] without interest begins in the 4th and 5th month of the year and it remains to us until the harvest of hazelnuts begins (Appendix, 23).

Despite the fact that the local exchange chain is constructed and maintained with the aim to eliminate risks, the local market is still signified as the most risky area of the hazelnut market. The risk is in the oral promises that might result in uncovered bills.

⁷⁷ Retrieved from tape-records of in-depth interviews.

The next section analyzes the informal debt relations between merchants, crackers and exporters.

The Cases of Giresun and Ordu in Debt and Borrowing Relations

The dichotomy of merchants and grocers vary in different regions and cities. This section provides a case analysis on the cities of Ordu and Giresun to depict the formation of different market settings in different localities. This discrepancy derives from difference in product quality, product price, land sizes, closeness to support mechanisms and the nature of market formation. It is significant to illustrate how two neighboring cities generate different relations between producers and merchants. The debt relations in Ordu are more contested and market-oriented than those in Giresun.

In Ordu, before the 1970s and 1980s, there was no interest borrowing and the lands were no dispersed. In those times, the big landowners, landlords, and those who could afford to make huge purchases, constituted an urban bourgeoisie. With the increasing production, producers leave their hazelnuts with the merchant for safekeeping until the time of sale. Merchants generated a profit margin through the hazelnut stocks of *emanet* hazelnuts. In the exchange of hazelnuts from producers, merchants provided cash in return. The merchants began to offer loan with interest to producers who were in need of cash. In the local market, there was no banking system that provided regular and constant support for production costs. Also, there was a lack of a reliable storage system. Therefore, the relations between merchants and producers in Ordu were settled into cash payments with interest rates and buying-selling relations on the ground.

Borrowing also started to be provided by means of foreign exchange. Although it was said that there were no interest rates applied, interest was indirectly charged through currency conversion gain.⁷⁸ The transformation of borrowing relationships into relationships took place via interest charges as a kind of usury and explained these relations with a class-oriented approach.

In Giresun, in comparison, the grocers benefited from the product quality and high demand for Giresun hazelnut. In that sense, they gained their profits from the yield of the hazelnuts produced in the region. In light of these discussions, the difference between the market formations in Ordu and Giresun may be summarized with various factors. The first factor is the high quality of Giresun hazelnuts and the chance to process hazelnuts at a better price. The hazelnuts produced in Giresun have always been of higher quality and more profitable than those produced in Ordu. Due to certified world quality hazelnuts, Giresun was able to step forth to the forefront of the hazelnut market.

Second, it makes a difference even if the price was not determined by Fiskobirlik, which gave priority to Giresun in purchase payments. As Fiskobirlik headquarters were located in Giresun, the priority also was granted to purchases from this city. Relationally, third, in the market, as the demand for Giresun hazelnut was high; hazelnuts of Giresun quality were exhausted in stocks. In Giresun, for instance, the debt relationship mostly was derived by blood relations or friendship. In Ordu, on the other hand, the debting behavior became a tool of capitalist production relations through which a high number of merchants, factories and producers created a market

⁷⁸ Prior to the coup of 1980, the village leaders demanded that no interest would be paid; and that borrowing were to be repaid on a fixed basis. With the movement in 1980 in Fatsa where the most ruthless interest rates had been charged, the debt books were sequestered. The development of Ordu's hazelnut market constituted a more commercial and aggressive system and was transformed into a struggle of classes. After the coup, the movements against the merchants came to an end.

based on debt due to the relatively low quality and high volume of product. In Samsun, usurers emerged due to the fact that the region was not originally a hazelnut city where the product and its market became highly commoditized.

Fourth, as hazelnut production in Ordu was widespread, the excessive and uncontrollable expansion of the crop led to the rapid exploitation of hazelnut production and producers who were in need of cash for production. The formation of a debt system, rather than a borrowing system was the result of land expansions in Ordu in conjunction with systematically developing market logic. Therefore, in Ordu, the local market was constituted on the basis of market mechanism on the logic of *debt* rather than *borrowing*. In Giresun, there was no consideration of such an expansion where the city was limited in geographical areas that did not allow such an expansion.

Producers, who described their relation to merchants as a form of conviction, considered their obligation to give their hazelnuts to merchants at low prices compared to the market, their compulsion to borrow money, and their dependence – as a result of borrowing – on low or uncertain prices compared to the market or current purchase prices as nothing else, but as an obligation and conviction. The statements of producers in relation to this can be depicted as follows:⁷⁹

The merchant came and took it, just as it was before. It has been the same for five or six years. Friendship, fellowship, friend of my brother... Last year, we sold half of it to the TGB at 4.70 TL in December; we sold the other half to the merchant in September, but only at 2.70 TL because we had borrowed money. This year, we have borrowed only a small amount from the merchant. We will try to keep it so long as the merchant permits. We will cut prices if he says so. If he lent money, he surely will cut the price promptly.

The farmers have no trust in places where exporters are present.

⁷⁹ Retrieved from the notes of in-depth interviews.

I trust merchants only if I'm acquainted with them. Others steal either from weight or in yield.

The merchants are long-established grocers. Integrated facilities are our biggest enemy (Appendix, 24).

The entrance of notions such as “hostility” “sentence” into the market is all a formation of this market structure that is not systemic. Trust relations are disrupted even more when crises are experienced in the market. A producer who correlated this distrust in the market with leaving for *emanet* said that the *emanet* system had relied on mutual trust in the old times, but that was no longer in question.

Emanet Hazelnuts

Emanet is a kind of exchange between producer and merchant. The exchange starts when producers leave their hazelnuts with a merchant for safekeeping until the time of sale. The exchange completes at the time of sale when producers take their hazelnuts out of safekeeping and sell to the merchant. However, between the period of leaving and selling to the merchant, the merchant utilizes the hazelnuts.

Hazelnut producers who do not have debt repayments or their dues dates keep their hazelnuts waiting. This both shapes the market and limits the production conditions. Not every producer has the storage capacity to keep his harvest. A very small number of the producers have storerooms at their houses. Both the storage conditions such as the temperature and humidity of the place to keep tons of hazelnut and ensure its security are very difficult for individual producers. Storage and debt requirements generate the need for *emanet*. Therefore, the aim of *emanet* is to

provide storage for the hazelnuts and to sell the produce at higher prices in the low season.

Merchants start exchanging, marketing or processing the *emanet* hazelnuts. The intermediary, who receives *emanet* product without paying any amount of money in exchange, sells with an exchange of payment or gives as a credit payment to the factory owner or exporter. Therefore, they can use *emanet* product in their stock to manipulate the market prices. If the merchants estimate that they will lose money, they may leave the hazelnuts of the producers to another intermediary as *emanet*, as well.

The merchants start receiving *emanet* hazelnuts from producers, mostly from the end of August to the end of export season in May, in order to prevent the product from remaining on hand. The timing, therefore, depends on the relationship with exchange partners of the merchants. If, for instance, a factory does not receive *emanet* product from the merchant, this creates troubles for the merchant. The exporters put pressure on the merchants to sell their *emanet* stocks in order to ensure the amount of stocks and to receive the debt payments that the exporters give to the merchants. Generally, the exporters tell their merchants that they should sell off their *emanet* stock by May 15 with the aim of neutralizing price changes in the following crop season.

Producers leave their hazelnuts with an intermediary (i.e., merchant, grocer or factory owner) for safekeeping until the time of sale without receiving payment in return at the time of delivery. They leave their hazelnuts with merchants and receive their payment in the following months. Therefore, *emanet* is a one-sided selling procedure in which the product is delivered with nothing being paid in return at the

beginning. As such, *emanet* is similar to a bank account yet provided by the merchant to be payable as cash. The producers call the merchant and sell their hazelnuts at the daily price. The expectation of the producers is that the market prices will increase in January-February. However, this is an expectation that is formed as the result of the communications in daily life and is not based on numerical estimations or systematic data.

The high number of migrant producers also constitutes a large share of *emanet* due to the fact they have to go back home to other cities and they do not want to sell their product at lower prices in the crop season. According to TSC (TUIK, 2010), in Istanbul, there are 453,000 people from the city of Ordu and 455,000 people from the city of Giresun. Based on a simple calculation, if only 15 percent of them give one ton of their product as *emanet*, it becomes almost 50,000mt, which constitutes a market share of one of the hazelnut cities.

When producers leave their hazelnuts, a considerable amount of the product enters into the market stocks and is able to reach a quantity to satisfy the market at the beginning of the crop season. Therefore, *emanet* saturates the market in the high season. *Emanet* has the impacts on market dynamics, stocks, exchange relations and pricing. Many of the producers are aware of this situation. Producers who think along these lines said as follows: “I never leave it for *emanet*; it is not in the interest of the farmer. We did it once, we got our fingers burned, and the price fell. In 1995 we leave our hazelnuts when it [*the price*] was 7.5 TL, we sold for 40 percent less.” ... “There is risk of getting lost after leaving for *emanet*.”

The *emanet* is not based on a documentary, contractual relationship or guarantee; instead, the system is based on trust and acquaintanceship to be treated on

a producer's carnet. If an intermediary records one ton of hazelnuts at the spot price of 2.5 TL and at the yield of 50 on the producer's carnet, then, the producer may come after three months, for instance, and receive a payment on the daily price on that day. If prices are high in this day, producers earn more money, or vice versa. As such, *emanet* also is based on expectations on future prices to be high. However, increasing prices may also generate risk for the intermediary due to the possibility of not paying a high amount of money in exchange.

Emanet also may become a part of debt relationships between parties, either producer, intermediaries or factories. In 2008, the season closed at the price of 3.2 TL and groceries ended up accepting *emanet* products due to the possibility that the opening price might be 2.5 TL. As such, the dependence of intermediaries on each other in terms of debt, credit or supply conditions becomes significant. If one of the parties acquires debt from the other, the debtor becomes in a position to leave his product to the creditor. During recent years, however, these trust relations become damaged in a system whereby a debt relationship constitutes the backbone of the system. The statements of producers who had *emanet* hazelnut for the safe keeping, but whose expectations were not met, were as follows:

Last year I left hazelnuts to a merchant from whom I got money. I put it into *emanet* in October, thinking he would buy in February/March/April. I leave hazelnuts so it [*price*] would rise 2.5 TL, but it did not rise, they're saying do not leave, but they are liars. The New Year comes, but the price does not rise.

We leave in safe keeping [*emanet*] for one year. It did not make money when it was here. I gave in September, I gave with a March due date. Five months later I got a check. It was profitable if it were three at that time we got 4.5 TL, in 2006.

Weakening Trust Relations

In the everyday lives of the producers, they overcame uncertainty with their commitment to hazelnut production. Also, the debt relations between the merchants and the producers supported the small producer and those who produced hazelnut as a primary income. The individual producers on the ground were isolated from the institutional sphere. The merchants and grocers, as informal institutions, constitute a significant resistance mechanism. Especially for small producers and those who produce hazelnut as a primary means of income, the debt relations between the producers and the merchants have become a way to overcome uncertainty. However, these mechanisms are weakening due to the damaging trust relations and the increasing rate of credit financing from banks.

A producer who works on a payroll can borrow cash money both from the bank and the merchant. The use of bank credits began to increase especially after the 2004 frost. Producers who are eligible to apply for bank credit may prefer the banks. The reasons for this increasing trend includes the reluctance of the merchants to loan, the low interest rates offered by the banks, and the attempt of the banks to attract the producers to receive farmer credits. The eligibility also includes the availability of land property as it is put up for collateral in the exchange for bank credit. A producer who was indebted to both the bank and the merchant said:

I borrow from the bank against cash. I try to keep my debt to the merchant low, because the price is not definite; there is uncertainty in the market. Will hazelnuts pay the debt? Will they not? That's not what we're looking for and thus I borrow little. I can easily get money from the banks. But if I don't pay it back in more than two years I can't get new credit. My acquaintances are also in the same situation. My father-in-law was going to give 1mt in the exchange of his borrowing of 8,000 TL ... He needed cash for the wedding.

An employee of a bank explained the advantages of farmer credits as follows:

The farmers are naïve individuals, everyone knows the farmer in the villages. His relationship with the merchant goes back to his grandfather, his father. A deep-rooted system; the producers are used to this system. However, with the development of the economy, if there is someone the producer knows, he receives the bank credit and he feels safe. The producer becomes one of us.

The banks, as a marketing strategy, directly contact the village headmen and the Chamber of Agriculture to create awareness and to increase the use of bank credits.

As the number of producers who use bank credits increases, through word-of-mouth, references, such as an acquaintance at the bank branch and peer pressure, lead to further increases in usage. The loyalty of the producers to their lands strengthens the position of the banks as the producers give their lands as mortgage in exchange for the bank credit. A branch manager at a private bank appraises the developments related to farmer credits in the following manner:

We have all of the farmer portfolios that have been passed on us from the bank which our bank acquired. We have personal contacts with 750 village headmen, 800 villages, more in the uplands villages ... A borrower would work as a construction worker in Istanbul, but he pays his debt. They're loyal to the land; therefore, they cannot sell their property that being used as collateral in their credit financing ... We give the credit in February to receive back in November. The reason is that in September the market is cheap and it rises in November. The producer is more aware, he will not bring down the product immediately, and the producer-merchant relations will be broken. The banks will come to the forefront. Do the merchants commit homicide in recovering their due payments? Banks do not wait. Three agricultural engineers work in our bank. The producers come with their village headmen, the village minibuses generally belong to the village headmen, and they crowd into the minibuses and come to our branch.

In 2009, the producers were in a position to pay back only the principal rather than the full amount. Both public and private banks had extended the due dates of the debt

payments. The crises experienced in the market affected the merchant-producer relations. As the result of the merchants' bankruptcies and the collapse of trust relations, the producers decided to apply for bank credits.

The collapse of the trust relations also was related to the power dynamics and the changing mechanisms that maintained the networks and the existing relations. The producers reacted badly to the state withdrawal from the market, which was unexpected. They rejected the withdrawal, saying that "the state shouldn't withdraw its support." The producers also conveyed their distrust of Fiskobirlik. Some producers were unable to receive their payments they had arranged with Şekerbank with Fiskobirlik as their guarantor in 2005. Some producers accused the administration for the bankruptcy of Fiskobirlik. The provision of discount vouchers in lieu of the debts of Fiskobirlik, provided they shopped from the Fiskomar markets, did not satisfy the producers. The disconnection of the producers from the market communication generated uncertainty and ambiguity in the everyday life of the producers on the ground.

The weakening trust relations were also related to the dissociation of the producers from the formal institutions which was derived from the difficulty in creating organized action and the distance of these organizations to the producer at the decision making stage. Also, the rhetorical devices created by these organizations had led to ambiguity and inconsistencies on the ground. Their distrust toward the Fiskobirlik administration in the market caused the producers remained unresponsive.

When one producer described this distrust, said the following:

The Fiskobirlik administration gets together. They do nothing, only eat and drink. They beat the producer's back. Those who gave the hazelnuts [*as members*] voted. I can't vote because I can't give hazelnuts. Every year I must give hazelnuts even if a little. If you postpone one year you can't vote. After 2000, Fiskobirlik started entering into other businesses [*retail stores like Fiskomar*]... They had a falling out with the government and make it a personal matter. Between Fiskobirlik and the government, the producers get hurt. Actually Fiskobirlik was a good thing. If Fiskobirlik bought the production surplus, the hazelnut would go at its worth.

A part of the producers voiced the fact that they had not benefitted from their partnership shares in Fiskobirlik's partnership system. They criticized "being a partner for that many years and having no monetary returns." The producers described their fathers' memberships and partnership relationships with Fiskobirlik. The trust in Fiskobirlik had decreased even more with the bankruptcy process of the institution. The producers were describing this cynical approach with the following statements: "My father was a member of Fiskobirlik, he had a certain tonnage. I became a member with the Chamber [*Agriculture*] recently. Even though it is a [*big*] institution like Fiskobirlik, it does not work. It is not professional, there are political people."⁸⁰

Another element revealing the dissociation of the producer from the trust relations was that the producers did not have knowledge about the institutions that were active in the market. This lack of knowledge appeared to be ignorance. The producers only had knowledge about the institutions with which they interacted in with their everyday lives. These consisted of the government, the Provincial

⁸⁰ This is the producer's implication that Fiskobirlik managers act according to their political interests, rather than in the producers' interests. This implication is derived from the political party struggles during the elections of the Fiskobirlik boards. During the selection of the board members and their election, the groups tend to create the boards and management body from the people that support the same political party.

Directorate of Agriculture, the TGB, Fiskobirlik, the Chambers of Agriculture, the Agriculture Loans Cooperative and the merchants. However, they had not even heard about other institutions appearing in the market and market partnership, such as commodity exchanges, exporters' unions, crushing and integrated factories and the Hazelnut Promotion Group. Even though institutions such as hazelnut producers' unions, the Union of Hazelnut, and the Hazelnut Research Institute were related directly to the producer, they were not institutions with which the majority of the producers were involved. Even though the fact that producer unions and the Union of Hazelnut were new institutions taking on new roles in the market was one of the reasons for this dissociation for the Hazelnut Research Institute, lack of knowledge and distrust could again be qualified as a prejudice of viewing the institutions. Additionally, the fact that their institution did not have a close relationship with the producer was a deficiency for the institution that had assumed such an important role.

The Informal Debt Relations between Merchants, Crackers and Exporters

The informal relations between the merchants, crackers and exporters are based on the debt relations. During the time of high hazelnut prices and high yield levels, the number of merchants increased until the time when they did not recover the advanced credit provided to the producers. After that time, these merchants went bankrupt. The credit usage of merchants became stagnant after the market crisis in 2004 and 2005. The bankers hesitate to provide credit to merchants and instead prefer big exporters by offering credit at high amounts.

During the time of economic crisis, for instance, exporters got a promise from factory owners within the framework of forward sales on estimated prices. However, in the case of price increases during the season, they had to go back on their oral promises. Similarly, the small players get into trouble finding product at arranged prices and thus they lose money. Even during the crisis times, some of the market actors who have had trouble finding product at low prices fulfill their commitments yet they lose a considerable amount of money. The small players may likely go into bankruptcy and thus they try to find out other options, such as bargaining, and future contracting.

In light of these local crises, the market maintenance through informal ties reveals two diverse implications. On the one hand, the network relations are based on mutual trust. On the other hand, the competition among exporters as well as between exporters and intermediaries reconfigures the trust relations. The trust is not endless and indisputable. The trust relations are based on competitive actions and subject to change at each transaction.

The network dependence maintains the market through prices, exchange and protection (in terms of price and stock availability). The exporters provide incentives for crackers, factory owners and grocers/merchants within the same network. The price given to intermediaries includes the profit of each network participant. The so-called market dynamics, which were transformed after the 2004 frost, stand on a supply mechanism created by exporters, intermediaries and producers. Through these networks, each exporter guarantees both himself and his network and stock position in the rear within the framework of forward pricing. In the case of low supply, the aim is to decrease the risk position.

The main power of the exporter in the local market is the usage of price tool; hence, the power struggle is executed through price manipulation. The exchange relationships based on debt also shape the prices and strengthen the power of price givers. The exporters do not give the same price, which they give to their network participants (crackers, factory owners and grocers/merchants), to other crashers or factory owners.

However, the merchants who buy, store and sell hazelnuts in the marketplace may not sell their stock immediately to factories or exporters due to the attempt to keep the stock as immediate capital. As the product price decreases, due to the low level of crop, their stock becomes more profitable. Therefore, the intermediaries might become the competitor of the exporters as well as other network participants. Considering one snapshot during the study with one of the brokers, a crasher had called him to learn the daily prices and latest updates. The conversation between two illustrated the encounter of exporters and crackers. If the higher price is given by the intermediary for kernel hazelnut than the exporter's price, the exporters give lower prices even to their network participants in order to eliminate the intermediaries. The power held mostly by the exporters tends to increase further by eliminating intermediaries. Even within the same network, as the price chain includes the competitors of the exporters and as they are profit sensitive, the exporters give competitive prices.

The fragility of trust relations within the network ties becomes apparent with such price competition. The exchange relationships are not necessarily based on trusting conventions; instead, these connections are shaped by competition, daily conversations as well as subjective and objective uncertainties. As such, the market

maintenance is not only based on trust but also competitive perception under uncertainty, which is shaped by the relations between formal (i.e., exporters) and informal (i.e., intermediaries) institutions.

Competition between Formal and Informal Institutions

Helmke and Levitsky (2004) analyze informal institutions in relation to “ineffective formal institutions” as a reference to the competing informal institutions. Informal institutions, the actors of which particularly are merchants, in the hazelnut market compete to maintain their power and roles in the market against the projects of licensed warehouses. The market disrupting effect of *emanet* has brought discussions about the licensed warehousing system as part of the market regulations since the early 2000s. The licensed warehouses have become new formations that might be identified as formal institutions.

The licensed warehousing system is an attempt to replace the unofficial nature of the producer-merchant-fabricator-exporter relations in the hazelnut market with a systematic and official order. It has not been implemented yet. Even though there have been initiatives from the exporter and the state institutions, the informal institutions have been in a position to resist any change to the existing exchange system. However, the reaction of these producers to the safe keeping has not transformed into an organized movement. Most of the producers who do not leave their crops for *emanet* are producers who have to sell their hazelnut just after picking to receive immediate cash in return.

During my field study I was invited to a seminar on licensed warehousing that

was organized by the chamber of industry and commerce. In the meeting, I found the opportunity to get together with exporters and journalists. These meetings, which were realized in between my conversations with the producers, also enabled me to see the abyss in between the opinion leaders and the producers in passing from one daily life of the merchants and producers to the other daily life of the exporters.

The meeting was in a tall multi-story building. When going up to the meeting hall on the top floor, in the elevator, the person who had invited me introduced me to a female journalist. She was a cheerful, witty woman joked with me about what a mistake I had made by selecting hazelnuts as the research topic. She introduced me to the other journalists at the meeting place. She indicated that each journalist should sit on the couches in the waiting hall leaving a seat in between each of them, saying that they were for someone to sit beside them from whom they could get news.

The session was presented by a bureaucrat from the state ministry on the licensed warehousing system and product specialized exchange. While an exporter, the owner of an integrated factory, was giving the opening speech, hesitated that the missing part in the Hazelnut Strategy that the government had announced in July 2009 was licensed warehousing. In the presentation from the ministry official, on the other hand, the licensed warehousing system was mentioned in terms of how and when the producer left his crop at the licensed warehouse, he would be able to use credit from the bank and cash his product bond at the exchange whenever he wished.

The resistance areas of the currently formed system based on the merchant-fabricator relations showed their dislike of the control, audit, guarantee annotation, insurance mechanism, product standards and official certification. By this means, the merchants who were not subject to control and audit in the existing system were

doing purchasing according to no standardized processes. The merchant perceived the licensed warehousing as a threat that would be brought in place of the current intermediary exchange system. The change of this order of affairs in the hazelnut market remained as a regulation that came from behind, like the liberalization of the market.

Licensed warehousing was in favor of the producer with changes such as the protection of the producers against price instabilities; the reduction of risk and the estimation of professional/loss situation. However, the resistance showed against this system even prevented the producers from getting to know the system. Nearly all of the producers I saw were not informed about licensed warehousing. This situation showed that they were dissociated from the institutions and areas of policy making.

Similarly, the exporters are working to initiate the system of licensed warehouse. More importantly, the supply chain system based on debt relationships and networks between exporters-merchants-producers makes the system more resistant to change. Similarly, contrary to intermediaries including grocers and crackers, on the way to protect their position in the market, brokers support the system of licensed warehouses as a significant part of market transformation through EU regulations, commodity and feature markets.⁸¹

The distrust in the market also stems from the belief that the licensed warehousing will be a system that will be formed and maintained by the exporters. Even though the licensed warehousing was a system planned to be developed and controlled by the private sector, the producers have not been able to find the means to see the shortcomings in the system and show resistance to it. In practice, the fact

⁸¹ This system will be explained in detail in following chapters.

that the private sector is dominant also reveals the difficulties in the implementation of the system.

Replacing such an integrated and developed system with the existing system is not a transformation that can happen at once. On the ground, the transition from the marketplace and bazaar mentality to market awareness is not easy. Market actors resist to this. The establishment of a product exchange for hazelnuts seems to the market actors like an impossible dream. This proves the rigidity on the ground against changing the existing market setting. The hazelnut market, which consists of small-scale producers, does not make it possible to settle warehousing in this type of system. While the producer-merchant debtor relationship forms the biggest segment of this system, the effort is being made to bring this market system in place of the cooperative organization system. However, the informal institutions resist and compete against the emergent formal institutions.

Conclusion

The chapter explains how hazelnuts are bought and sold in the local market. The buying and selling relations in the local market are conceptualized as network relations between the market actors based on the informal relations of exchange, debt and price information flow throughout the networks. The local market does not only consist of buying and selling relations. The informal institutions composed of the relations between producers, intermediaries and exporters supply the continuance and maintenance of production and exchange in the market making. Moreover, the chapter revealed that not only social relations but also the material things and their

exchange are embedded in locality. The loyalty of the producers to hazelnut production is the material aspect of exchange rather than social relations alone.

The chapter analyzes the constitutive and changing dynamics of the informal institutions. These relations were based on the debt-exchange relations between producers, intermediaries and exporters. Although the exporters are the network leaders, each individual within a given network has an impact on its continuance (i.e., debt payment, commitment on the agreed delivery or exchange and *emanet*).

Since the 2004 frost, many of the merchants have gone into bankruptcy and the informal verbal promises have not fulfilled. A similar position affects the producers. Following the merchant bankruptcies, the producers started borrowing from banks but could not pay back the full amount. Most of the producers could pay the interest amount and postponed the payment of principle capital. Due to the fluctuating prices and market crises, the merchants started hesitating to provide loans for the producers. The role of merchants had become limited due to the damaged relations between the merchants and the producers. The chapter provides an insight on these changes have led to the damage of the constitutive of market maintenance. As the reciprocal exchanges has been damaging, the ability of the exporters to foresee, manipulate and manage uncertainty had become delimited.

Diverse exchange relations create different market settings, traditions and vocabularies. The difference in the concepts of grocers and merchants reflects the dichotomy between the formalist and substantive approaches. While grocers use the vocabulary of borrowing (*ödünç*), merchants use the vocabulary of debt (*borç*) and interest. Such differences prevent the researcher from making generalizations about a specific market. The hazelnut market in Turkey generates different local market

settings, vocabularies and sociological implications. In the chapter, the factors of these observations were analyzed using the case of the markets in Giresun and Ordu.

The concept of trust has been used by the market actors to define it as the tool of these reciprocal exchanges. In fact, trust has become a kind of compulsion and obligation of the market actors if the power is decreased to create, manage and maintain exchange networks as well as to manage with uncertainty. Mostly the exporters, who manage the flow of price information, execute this power. The next chapter provides an analysis on how the exporters have a role in pricing. Nevertheless, the power to control information flow and to be involved in the pricing-setting process has become disabled as other market agents now have indirect impacts.

This chapter revealed how the relations between producers and merchants depict a different type of an exchange relation. The producers enter into give and take relations with the certain merchants. Similarly, the merchants enter into the same relations with the producers whom they have known for a long time. This is not a bazaar-style that Geertz (1978) identified, where the exchange form involves non-standardized quality and valuation of goods; hence, the prices are more volatile. In this kind of bazaar setting, the search for reliable information is the focus of the bazaar and it is difficult for actors to obtain reliable information.

Moreover, in the hazelnut local exchange, buyers and sellers are not free in the sense that the classical economy envisages. The reciprocal relations also affect pricing in such a way that at each transaction a different price and exchange relation are executed. The reciprocity is based on both gift (i.e. debt) and commodity (i.e. hazelnuts) exchange. Although the same design continues, since the 2004 frost, the

solidarity between merchants and producers and the trust relations have been damaged. Since this solidarity is the constitutive of the local market, the dynamics of the trust relations need to be considered thoroughly.

The transformation at the local market and the mechanisms of market maintenance had been also significant for the market agents. Moreover, the nature of the product and the local configuration of local market point out the uncertain elements, which contributes to the maintenance of the market (i.e., yield measurement, yield profit, yield calculation, informal exchange relations, and diverse market setting). As such, the yield measurement became a tool for intermediaries to resist against uncertainty. The yield measurement included flexibility in interest and price. Each exchange transaction, the difference in yield generates revenues for the intermediaries. Further, the network leader protects the intermediaries with the relatively higher prices to maintain its network. Therefore, it became a factor of resistance of informal institution against formal institutions.

This chapter also provides an analysis on the implications of informal institutions and the competitive interaction between formal and informal institutions. I concluded that informal institutions are tools to maintain the local market. Nevertheless, as the market dynamics have evolved throughout time because of market crises, these institutions have been transformed in terms of the relations between the market agents. With market reform that proposed the involvement of formal institutions, informal institutions have come in a position to interact and to compete with formal institutions.

The competition between formal and informal institutions points out the local resistance against the making of what the neo-liberal policies intend to achieve on the

local economy. The resistance on the ground to maintain the informal institutions signifies the dynamic nature of the markets that include multiplicity and diversity. The technical aspects (i.e., market reform policies and projects for the creation of license warehouses) of socio-technical controversies had been overcome by the social aspect (i.e., informal institutions and exchange).

CHAPTER 5

THE GLOBAL HAZELNUT MARKET AND PRICE FORMATION

The hazelnut market may be identified as a “dealer market” (Dodd, 2002), where the market is constituted by bilateral negotiations between one or more dealers. This is an over-the-counter (OTC) derivatives market with little or no regulatory framework. Derivatives are forward (*alivrer*)⁸² agreements in the hazelnut market. A forward contract means a contract placed in one crop season for delivery in the following season.⁸³ The price of the forward agreements is derived from an unknown price of future hazelnut crop. This is an expected price derived from the expectations, perceptions, short or long positions of exporters, importers and international brokers, relations between them, as well as speculations.

At the global level, the market actors execute the prices for the future crop, which is an unknown. The exporters close the deal with the global buyer for an unknown amount of hazelnuts at an unknown price. Therefore, uncertainties occur at the local level, such as the amount of crop, producer’s positions, and institutional struggles, spot prices of the new crop, purchase prices, interest rates, bank credits, and speculations.

When I started studying the hazelnut market in 2006, I first met with the local market actors, including at that time only merchants, producer organizations and producers. Every market actor I talked to mentioned that the exporters’ pre-sell

⁸² *A livrer* means “to be delivered” in French. The term is used as *alivre* in the local market. One leading exporter called the *alivre* price a *fictitious [hayali]* price.

⁸³ For instance, an *alivre* contract may be created, for instance, on December 7, 2012 to be provided for delivery in October-December 2013.

hazelnuts that are still on the tree (*daldaki findiği satmak*) at forward prices and thus the decrease in spot prices is due to the forward contracts signed by the exporters with the global buyers. Also, I was told that the hazelnut market price is formed by something they called the “*Hamburg Borsası*” (Hamburg Stock Market) in Germany. Not only in the hazelnut regions but also in the country in general, anybody who talks about hazelnut prices, in the news, in articles, even in chats with a producer or a representative of institutions, would say that the hazelnut price is formed in Hamburg.

Therefore, I sought the forward price and the reaction of the local market actors to it. As not every market actor is informed about how prices are formed, there is a locally constructed perception on hazelnut price formation based on the impact of forward prices (the selling prices of exporters) on spot prices (the buying prices of exporters). On the ground, the local market actors had the impression that the exporters decrease spot prices to mitigate their profit out of forward prices. As this perception was constructed at the local level by emotions (i.e., suspicion, hatred), it was difficult to explore forward prices. Even the exporters hesitated to accept that they made forward contracts.

In light of this framework, this chapter does not explain how this local perception is constructed, which is the subject of the next chapter, but probes how hazelnut prices are formed. Market integration is defined as a consequence of separate local transactions being mediated by price mechanism (Dilley, 1992). A set of prices is identified in order to understand the pricing tier in the hazelnut market. This tier allows the demonstration of how each pricing includes different interactions and power relations. In this tier, while the global market is operationalized through

forward and export prices, the local market is observed through spot and purchase prices of the hazelnut exchanged in the local market:

- *Support Purchase Price*: The hazelnut support purchase price declared by Fiskobirlik (1964-2003) or TGB (2006-2009) on behalf of the state.
- *OTC Market Price*:
 - The forward price is formed in the pre-selling of the product to be delivered in the future at the global level.⁸⁴ Not every export price is forward price.
 - Spot prices are formed by the local market actors for the daily exchange between producers, intermediaries and exporters at the local level.⁸⁵

In the market, buyers and sellers deal on any amount of hazelnuts to be delivered on an agreed term. If a seller acquires the necessary amount of crop in the time of agreement to be delivered on time, there is no risk of forward. There is nothing more than natural about it in trade relations. However, when the exporters pre-sell the future crop, controversies begin in a way to produce destructive uncertainties.

Forward contracts are a general way of transaction in the OTC markets. There is a direct relationship between forward prices and spot prices (Allaz and Villa, 1993; Green, 1999; Ferreira, 2001; Lien, 2000; Le Coq and Orzen, 2006, Wolak, 2000;

⁸⁴ In the OTC market, at the global level, the market prices executed between global buyer and global seller are identified as bid quote (a price at which someone is willing to buy), execution price (a price at which a trade occurs), and ask quote (a price at which someone is willing to sell) (Dodd, 2002). In this definition, the execution price is the forward or export price.

⁸⁵ Spot prices might be daily export prices as well.

Adilov, 2010). Also, the relation between forward contracts and spot price instability are related to the arrival of new information (Sladet and Thillet, 2006). The deviation between traded price and expected market valuation also is caused by market imperfections such as fixed costs and inventory risks (Jankowitsch, et al., 2011). Moreover, Duffie et al. (2005) argue that the bid-ask spread is lower if the investor has easy access to the market maker.

The models take for granted the nature of forward markets as being transparent, well developed and based on rational estimations. If market actors forecast prices in rational expectations, based on accurate and consistent data and systematic follow-up, forward contracts are efficient. If market actors are affected by historic prices, the efficiency of forward contracts decreases. Moreover, these studies focus on the effects of forward contracts on decreasing spot prices that reduce the market power of the forward contract owner.

However, the hazelnut OTC market has different characteristics from those analyzed in the literature. The hazelnut market is a market with little or no rational estimations and yet with the dependence on historic prices (Adilov, 2010). One exporter identified the hazelnut market as a mobile stock exchange (*ayaklı borsa*). In the case of the hazelnut market, the sellers who sign forward contracts on the basis of forward prices are global sellers who are hazelnut exporters. The economic models assume, however, that the sellers of forward contracts are the same sellers who sell contracts at spot prices.

These economic models conclude a relational implication between forward and spot prices. However, the literature is very limited in probing the everyday life of OTC markets. Although the theoretical models include possible variations and

factors that affect pricing and valuation, they cannot explain how these markets work. It is significant to probe why the price decreases, by whom the prices are affected, how the price formations from forward to spot prices is managed, controlled and manipulated, and how the power relations are configured. The study of the everyday life of the markets provides insight into the market activities as well as the factors that affect pricing, valuation and market making.

In light of this introduction, this chapter analyzes the politics of the making of these prices by asking the following questions: How is the hazelnut price formed? How do different prices (i.e., forward, spot and support purchase prices) interact with each other? How does this interaction create encounters of market groups and uncertainties? How does the global interact with the local in price formation? How uncertain are the prices at the local level?

The chapter starts with a discussion on the dichotomy of the global and local in relation to how these two spheres diverge at the local market and converge at the global level. The next section explains the characteristics of the hazelnut market. In the following section, the interaction between the local and global markets is analyzed through price formation. Therefore, the market price tiers are identified. These concepts and local-global relations are embodied by three case analyses. Three cases are the price process of the Fiskobirlik purchase price in 2005, the price formation in the 2009 crop season, and the role of hazelnut kings in the local and global markets.

Dichotomy of Global and Local Markets

The market is more than buyer-seller relationships and the supply and demand conditions of exchange. For Carrier (1997, p. 3), the market functions as a means of communication between buyers and sellers. Dilley (1992) defines markets as a geographical aggregation of localized exchanges. The market includes flows of a single item and processes involved in exchange are aggregated and represents a “contested field of power” (p. 6). However, the markets are constituted not only by power relations, but also maintained by the uncertainties created by these power relations of market groups.

Human actions presuppose a network of social relations and market systems that constitute and maintain each other (Bhaskar, 1979). As Kneafsey et al. (2001) write, “Economic activities are explicitly based on locally embedded resources” (p. 296). The local market setting affects the global market environment and the way the prices are formed and the design of the product is exchanged. The local market actors (i.e., exporters, intermediaries, local institutions, chambers, state organizations and producers) continuously compare and negotiate their identities and interests in order to build, or re-build not only the local market environment, but also the global market.

However, such a continuous controversy for power maintenance is executed mainly by the market groups. The notion of locality has become important in analyzing how social processes produce global market, especially in relation to market making and self-interested power relations. Global sellers (exporters) and local institutions (formal institutions) have the power to act to pursue their own

interests and alter the conditions and events or create new conditions and events. The power is based on the ability to generate, manage and control information (i.e., price information, competitive strategies, and policies). As such, power might manipulate the possibilities to make impossibilities possible.

The dichotomy of local and global might be embodied through the concepts of the “visibility” and “invisibility” of market actors (Dilley, 2004). While the local market actors, who are producers, merchants and intermediaries, are visible and reachable, the global market actors, who are exporters and importers, are invisible and unreachable. This is a constructed perception on the ground. This presentation of global market actors is based on the process of price formation. The invisibility of global market actors constitutes a redefinition of power relations. As such, power is the ability to determine and to be involved in price formation processes as well as to intervene into uncertainties in these processes. As forward prices are set between global buyers and sellers, the price information is not visible to the market actors, except exporters, at the local level.

While interviewing both global and local traders, I was able to follow the daily forward prices. However, when I revealed the daily forward price to one local market actor who was not in touch with the exporters, I was asked how I had been able to retrieve the information on forward prices. The forward prices are invisible in that sense. As this power becomes invisible, the local market actors perceive themselves as disabled and ineffective against this power. Invisibility reinforces the hostility and mistrust against the exporters. Apart from such international and national indicators on the markets, the local market provides visibility and inquiry about the dynamics. The stock situation, product receipts and transfers, loading and daily transactions can

be observed easily in the local market.

The processes of market making present complex, dynamic, active and constitutive of controversies in which a variety of market groups are involved. Therefore, the interrelationship between social structures, institutions and agency includes complicated and uncertain interactions that occur in asynchronous conduct in space and time (Thompson, 1984). What makes the dichotomies of local/global significant for this chapter is the uncertain processes between the local and global markets.

The Global Market on the Ground

When I interviewed merchants and crackers in the local market, I noticed that they positioned themselves similar to producers. The circumstances were the same for all actors excluded from the price formation processes. Accordingly, while the exporters are involved in the price formation process and shape and control it, the crackers, merchants, grocers, and producers are excluded from these processes and remain outside of the market/price making. Although they are the part of the market universe, they do not possess the power to be included in the making of the market. In that sense, the power to make the market drives from the extent to which one is involved in the price formation. This is the power on the control over contingencies (Marris, 1996).

Many merchants and crackers said, “We can’t see our future.” The statements of a cracker about the effects of market changes on the local market were as follows:⁸⁶

This year, TGB didn’t buy any hazelnuts. The TGB has got stocks, the storage buildings are full. This has been bad for the producer, because they were forced to depend on merchants. This is the same for us. We have a factory [*we work with*]. It belongs to my cousin. We transport the hazelnuts to that factory. I don’t expect a good price. The prices will decrease; the yield prices will decrease, too. We used to lend money to 80 percent of the producers that brought us hazelnuts; we met their expenses. Over the past two years, we haven’t been able to get our money back. When the prices fall, we stop lending money. We avoid it, because we can’t see our future. We learn the daily price from the factory. This year, the prices will be determined by exporters and factory owners. We can’t collect our receivables. Otherwise, who determines the prices wouldn’t be important. We are told to buy hazelnuts and we buy them; then we fade from the scene. The major profit is achieved by exporters and factory owners.

Their inability to interfere in uncertainty makes them disabled. Similarly, a merchant who supplies hazelnut to a cracker instead of to an exporter is also disconnected from the export processes. Similarly, the changes in the daily market life have equal effects on these groups. Even though merchants and crackers stand closer to exporters, they are forced to stay in processes that are disconnected from the price formation. Therefore, the intermediaries have been affected by the price decreases, similar to the producers.

The dichotomy of the global and the local markets is constructed by the perceptions and impressions of the market actors in their everyday lives. In the local sphere, from a complete outsider’s perspective, I had the impression that the actors had cynical views about the hazelnut market by telling me about coercions, and verbal or physical threats. More so, one institution representative suggested that I not

⁸⁶ Based on the notes of in-depth interviews.

reveal that my Ph.D. subject was in political science due to the fact that it unsafe to be part of the political. These notifications made me feel uncomfortable when dealing with the merchants, and even exporters. These rumors and general inclinations became apparent in a way that informal relations between parties and unpaid bills or obligations based on trust or oral contracts might result in undesirable and illicit interventions. In the global sphere, yet, these local impressions become blurred and the perceptions created at the local market disappear.

The largest hazelnut exporter, Oltan Gıda, founded with this name in 1984, is perceived as an inscrutable power on the ground. The background of the family business in hazelnuts goes back to the 1940s. The self-esteem and credibility of the company is derived from its old and trusted relations with the market actors. In fact, what creates such an impression is not the company, Oltan Gıda itself but its network of merchants, intermediaries and suppliers in the local market. This perception is due to the invisibility and the prestige power of the company on the ground.

At 8:30, I was at the entrance of the factory of Oltan Gıda. Every hazelnut factory I visited had strict security procedures at the entrance and the security officer did not allow anyone to put one step further without the permission of the management. At Oltan Gıda, since the manager was in the courtyard and I had made myself visible to him, there was no need for the security to investigate me. When we entered the factory, I was impressed by the new building, developed equipment, improved facilities, modern working environment and the attitude of the employees.

Actually, every hazelnut factory has the same standards in terms of production and processing. As such, the difference of Oltan Gıda is its size and then newness of its facilities. It was founded in 2007 with 100 percent equity capital. The dining and

break rooms of the employees are very well designed and pleasant. Almost 400 people work in this factory. In fact, this is their largest factory among three other factories located in other provinces and cities. These factories include several processing equipment to crush hazelnuts in every required size. The growth factor of Oltan Gıda is its amount of hazelnuts export imported by Ferrero, the largest hazelnut buyer. For that reason, they even operate a separate cracking factory to crush hazelnut. In this factory, the company crushes hazelnuts for Ferrero. This is the reason why Ferrero processes hazelnuts in their own factories abroad and keeps them fresh to add to their confections.

The local perception of Oltan Gıda had originated from the perception of the informal institutions. It is the perception of producers and merchants who are outside of the export market. The perception represents the power position of the exporters in the local market. The misperception is mutually created by the impacts of the global on the local market.

The Characteristics of the Hazelnut Market

In this section, three main characteristics of the hazelnut market are analyzed in order to provide a clear understanding on the market constitution. First, the hazelnut market setting is constituted by informal relations and simple socio-technical tools that maintain the market relations. Second, the type of market constitution includes big sellers and big buyers. Although, at the local level, there are numerous intermediaries and producers, at the global level, there are a few global buyers and sellers.

Third, the market is identified as transparent in terms of the information flow and as opaque in terms of the price formation process. In light of these features, this section provides a brief examination of each of these characteristics of the hazelnut market constitution. Further, the profit margins of the exporters are defined in relation to the cost and profit of the hazelnut exports. The rest of the chapter examines the implications of these characteristics.

The Shift from Foreign Brokers to Local Exporters

Hazelnuts are exported to mostly European countries. Up until the 1970s, the hazelnut trade was performed by the international brokers, who were mostly Euro brokers who came to the local marketplace to purchase hazelnuts on site. In those times, the trade of hazelnuts was mostly exchanged as unshelled without exposing the product to processing. Also, the hazelnuts were stored and processed in the importing countries. In those times, the hazelnuts were traded only in the crop season and the amount of hazelnuts were purchased at one time in a given crop season.

The first processing factories were established in the 1970s in Turkey. During the 1990s, the number of processing and cracking plants increased, mostly supported by state incentives. Therefore, the hazelnut trade shifted from international brokers to local intermediaries and exporters who possessed processing factories and storage capacities. As the production capacities and the stock availability improved, the importers attempted to decrease their costs of storage abroad. These plants were certified and improved through the global systems of production standards such as HACCP (Hazard Analysis and Critical Control Points), GMP (Good Manufacturing

Practices) and microbiology laboratories. Currently, almost 45 percent of the export market is constituted by processed product.⁸⁷

The push factors of these changes in the industrial hazelnut production included the high cost of processing in Europe; and the stable stock and price levels, and the rising capacity of private enterprises in Turkey. Such changes not only shifted the nature of the trade, but also enhanced the product categories. Throughout these changes, the large global buyers started to purchase the processed hazelnuts.

Since the 2000s, the hazelnut season has spread throughout the whole year due to continuous transactions. In fact, the crop seasons might be distinguished in terms of delivery and loading times, which begin at the end of August to December with everyday transactions with an overloaded working period, day and night. Pricing decisions start from December, intensify in June and July. Therefore, the price formation is not a one-shot point of reference to be observed, defined or clarified. Instead, it is an enduring and uncertain process of daily and rapidly changing price, communication and distribution processes that are initiated with a continuous sales circle.

A Market with Simple Socio-Technical Tools

The hazelnut market is created with simple-socio technical tools. The general attitude of exporters, factory owners, crackers and intermediaries is to save today without planning for the future. Those who are able to combine both education and capital are successful today. For instance, Oltan Gıda, which is the largest hazelnut exporter in Turkey, has a website on which only access information appears. In today's

⁸⁷ Based on the notes of in-depth interviews.

competitive global business setting, the lack of a detailed website as a marketing tool points to the overconfidence of the global sellers, and the overdependence on a few global buyers.⁸⁸

In this type of small market, the market actors have close connections to each other. When I witnessed one exporter's telephone conversations, he was giving a quote in an informal manner and after the bargaining he closed the deal by saying, "My dear friend, it is OK for \$490." The informality in the market also might be exemplified by the informal relations between two hazelnut traders. Throughout the 1990s, Başkan Gıda, the largest exporter in those times, supplied hazelnuts at a price with no profit to Indo-Med. After Indo-Med sold hazelnuts at a profit, the two, Indo-Med and Başkan Gıda, shared the profit equally. Therefore, the two parties relied on their promises to supply hazelnuts and to disclose the profit on the sale. The informality between two companies was based on Başkan Gıda's support of Indo-Med when Indo-Med had financial difficulties due to the crisis in Russia and the debt problem of its Russian customers. Başkan Gıda supported the company by means of working capital. As based on reciprocal relations, the owner of Indo-Med felt personally indebted to Başkan Gıda (EWHC, 2009). As such, the informal relations based on mutual trust prove the informal characteristic of the market.

The market is constructed through socio-technical processes yet in a very simple, highly competitive and small means. Although the market volume is considerably high, the local market is very small and all of the market actors at the national and international levels know each other. With the aim of determining their position, they meet at international conferences, trade exhibitions, special visits, and

⁸⁸ In recent years, some of the exporters intended to develop the domestic consumption and thus started creating new marketing and distribution channels.

meetings and at the events of NGOs and government offices such as the Trade Councils, Exporters' Unions and Commodity Exchanges. As such, they use simple socio-technical tools including mobile phones, e-mailing, screens displaying commodity prices (i.e., cacao, gold), exchange rates, parities, interest rates and simple statistics.

They analyze the past data including past crop level, export, domestic consumption, the product coming to the market, the attitude of producers, and sector reports. The changes in commodity prices are also significant in terms of the prices of ingredients of chocolate industry. Cacao prices are the major indicator of market dynamics in the chocolate industry. Exporters constantly follow global trends in commodity prices and exchange rates through indexes on screens as well as at meetings with bankers. The international conference of the International Nut and Dried Fruit Foundation is the main source of information gathering and market research. During these conferences, estimations and prospects are discussed.

Big Buyers and Big Sellers of the Hazelnut

The hazelnut market is controlled by big buyer and seller companies by which the hazelnut price is determined through the information processing and networking activities of market actors. The Table 11 below depicts how a few companies dominate the hazelnut export market. The empty data is due to the fact that these companies did not want to reveal the amount of hazelnuts exported and the value of their exports.

Table 11: The Top 20 Companies in Hazelnut Export (2010)

Rank	Company Name	City	Amount (Kg)	Value (\$)
1	Oltan Gıda	Trabzon	56,743,567	362,102,401
2	Poyraz Poyraz	Ordu	(*)	100,064,344
3	Durak Fındık	Ordu	11,633,392	74,939,609
4	Yavuz Gıda	Giresun	11,247,134	70,046,873
5	Gürsoy Tarımsal Ürünleri	Ordu	10,072,553	65,410,117
6	Sabırlar Fındık	Trabzon	10,402,185	63,263,963
7	Özgün Gıda	Trabzon	10,312,922	60,309,720
8	Arslantürk Tarım Ürünleri	Trabzon	8,614,402	52,603,029
9	Karadere Tarım Ürünleri	Giresun	6,837,699	38,706,814
10	Yılmaz Tarım Ürünleri	Samsun	(*)	19,560,209
11	Özenginyurt Fındık	Ordu	2,561,771	14,090,507
12	Şenocak Gıda	Ordu	1,977,285	11,705,717
13	Yavuzkan Hazel Gıda	Giresun	(*)	8,775,635
14	Özyılmaz Fındık	Samsun	1,411,725	8,199,871
15	Demirciler Gıda	Giresun	1,092,989	6,636,922
16	Mehmet ve Şahap Bozbağ	Giresun	(*)	5,216,469
17	Başaran Gıda	Trabzon	(*)	5,121,677
18	Karter Gıda	Samsun	891,063	5,058,724
19	Kurtsan Tarım Ürünleri	Ordu	679,484	3,988,926
20	(*)	(*)	(*)	(*)

Source: Karadeniz Exporters Union, 2011.

* Companies did not want to reveal the amount of hazelnuts exported and the value of their exports.

According to the Table 11, almost 50 percent of the total hazelnut exports of these top 20 exporters are executed by two companies. In 2010, Oltan Gıda and Poyraz Poyraz exported a total of 462,166,745, which was almost the total export of a number of top hazelnut exporters. On the side of import, Ferrero founded a company in Turkey to buy and store hazelnuts against price volatilities. It also plans to build a production plant to be completed in 2013 in Manisa, in the immediate vicinity of the Izmir port, in west Turkey (Ferrero, 2011). In this type of market structure, the prices might be manipulated by big buyers and big seller who hold the greatest amount of stock or capital by taking a large amount of hazelnuts off the market and by putting product, mostly old, stocked products, on the market at lower prices. Examples of this phenomenon will be provided throughout the chapter.

Transparency and Opaqueness in the Hazelnut Market

When the local spot price is executed, the information flow is open and transparent in the hazelnut market. However, the opaqueness is related to the lack of transparency in the price formation, the amount of orders and the registering with the Commodity Exchanges. Therefore, the hazelnut market is transparent at the local level, but opaque in terms of the communication of the global level with the local level.

The exporters, factory owners, crackers and intermediaries are informed through single message service (SMS) via their cellular phones. Any information of price change can be conveyed in maximum five minutes within the market. In that sense, it is an interactive market. Dodd (2002, p. 2) describes this kind of market making as follows:

Dealers have direct phone lines between themselves and other dealers and their major customers, and this enables instantaneous communication so that a market participant can call up a dealer, ask for quotes and then hang up and call another so as to survey several dealers in just a few seconds. A quick series of such calls can give an investor a view of the market that is not entirely different from a view obtained by observing a multilateral negotiating process.

The opaqueness is identified in three market spheres, which are the process of price formation, the strategic information of stock levels and the regulatory registration. First, in terms of the communication of the price makers with the intermediaries, the market is opaque. One broker said, “You have to be hidden (*kapalı*) if you want to be a big player.” This hidden aspect of the market is also its characteristics to overcome risks and competition. Nevertheless, as an outsider, I surmounted the competition among the exporters by developing relationships with them. Some of the exporters shared their opinions and tactics. In that sense, the lack of transparency might be related to the competition and risk position against the competitors.

Second, the opaqueness is also related to the strategic information when the exporters, factory owners, crackers and intermediaries are not willing to share with each other. In the local market, someone who acquires accurate information as early as possible acquires an advantageous position. Via phone calls, the exporters also acquire the strategic information and knowledge about the market conditions, their competitors, the amount of hazelnuts purchased and sold by the competitors, the position of intermediaries and the prices executed in these purchases. Therefore, the buying-selling relationships are performed through phone calls between exporters and brokers have regular contact and talk about everyday matters as well.⁸⁹ The price information is acquired through these conversations and the daily market is constituted from the information flow among the market actors including exporters,

⁸⁹ Based on the notes of in-depth interviews.

intermediaries and producers. These conversations also include rumors and information about others as well as general pricing information.

The credit usage of the exporters, for instance, is also significant information for them. Credit usage may become intense during September, October and November. At the time when I worked with one exporter, two bankers visited him and talked about the market, the behavior of exporters and conditions of their business, past experiences, export indicators, possible strategies, market trends, credit usage and risk consideration in the market.⁹⁰ Throughout these conversations between bankers and exporters, they somehow provided insider information and necessary local knowledge about the market as well as market potential of exporters to be evaluated as part of their risk assessment.

Through the daily conversations among the market actors, it is important for the exporters to learn about the stock level of their competitors. During special meetings or ad-hoc, face-to-face conversations, they may reveal to one another their stock positions due to the fact that it is considered inappropriate to ask directly about their company situation and position. Some of them, however, might mislead each other, particularly when prices are low; they might act as if their stock position is high. If, for instance, an exporter or an intermediary purchases hazelnuts from the TGB at a high price, this indicates a possible increase in the supply of hazelnuts and a change in future price levels. Exporters also can also predict each other's stock levels and they can even observe their position through records in terms of price, quantity and sales registered at the Commodity Exchanges.

⁹⁰ The relationship of the national banks with the international banks in terms of export and syndicated loans necessitates reaching the agreed level in credits. The hazelnut exporters become an effective source for the national bankers in terms of a fast and easy flow of cash in order to reach the targeted level rapidly by providing export credits in the hazelnut market. In fact, due to high risks in the market, the credit decision of the banks may result in failure.

The rumors and informal networks may generate misinformation and uncertainties. The stock level also might be taken by exporters either to guarantee a necessary stock or to manipulate prices or to acquire a certain amount of product on behalf of importers. The stock level becomes clearer toward the end of July and the beginning of August on a number of figures, including the amount of purchases by the exporters. Those who have capital and can stock a certain amount of product may generate doubled revenue, especially following the crop season in November and December. However, stock also may create risks due to uncertainties. If a buyer who aims to stock hazelnuts, for instance, obtains bank credit for storage, a credit risk occurs.

Third,⁹¹ when a forward contract is signed between the parties, the exporter has to register it in the Commodity Exchanges. However, the registering to these institutions does not have systematic or strict requirements. The manipulation of the numbers is open to misuse. The accuracy of data in these institutions needs close investigation in terms of late registering or renumbering.

Avellaneda and Cont (2011, p. 15) differentiate informational transparency from regulatory transparency. They propose the significance of “full post-trade transparency” rather than regulatory transparency that the traders reported to the regulators. The regulators in the hazelnut market are the Commodity Exchanges in each district and city. The role of these institutions is to determine, register and declare the market prices of commodities. The price declared by the Commodity Exchanges is the daily price that is formed at the first transaction on a given day. If

⁹¹ Based on the past experiences of market agents, many stories were told about false papers and failing deliveries.

there is no transaction on the time the price is to be announced, the price is determined on the basis of the previous day's price.

In the hazelnut market, the transparency of Commodity Exchanges therefore cannot be identified as “full post-trade transparency.” As the pricing and registering depend on the actor's behavior, the full transparency is based on the willingness of the exporters to register their activities. It is considered, in that sense, the lack of “necessarily disseminated” reporting “immediately to all market participants” (Avellaneda and Cont, 2011, p. 15). The regulatory role of the Commodity Exchanges in terms of price determination and registering is very limited.

Export Specifications and Profit Margins

The export specification of hazelnuts includes origin of produce (i.e., high quality hazelnuts from Giresun; hazelnuts from regions except Giresun, known as levant), class (i.e., high quality; lower quality paste; medium quality granulate), size (i.e., between 11-15 mm), crop year, optional official control mark and minimum requirements (i.e., the removal of damaged and inured hazelnuts, cleanness, freedom from rancidity, well formed, dried, of the required moisture).⁹² These classifications are crucial for the importers, especially Ferrero to maintain its reputation on quality. Relationally, the capability of the exporters to provide hazelnuts for Ferrero is also crucial for their reputation in commercial relations, especially when international standards and the quality of well-known global brand are concerned. To reach these export specifications increases the cost of processing.

⁹² For a detailed spectrum, please find the directory published by OECD (2009) at: <http://www.oecd.org/dataoecd/48/18/46593468.pdf>

The profit margin of the exporters depends on the availability of capital and stock. There is a fixed cost calculation in hazelnuts instead of a cost based on percentage. The profit margins are fixed in the hazelnut market (Table 12). Since the sales volume of hazelnuts is in large quantities, even a small percentage change in quantities generates high changes in profit levels.

Table 12: The Calculation of Hazelnut Kernel (Shelled) (in USD per mt)

Product at Spot Price	3,200.00
Processing Costs	200.00
Export Tax	100.00
Export Costs	50.00
Profit	150.00
Total	3,700.00

Source: Adopted from EWHC (2009).

In the local market, the wagon price, which is equal to 10mt of kernel hazelnuts, is negotiated. Each wagon in exporting has the capacity of 10mt of kernel hazelnuts. When an exporter reveals the price to another exporter, he says, therefore, that the price is \$37,000. The profit margin is based on a fixed amount ranging from 1,500-2,000 TL (\$1,000-1,500) per wagon and 150-200 TL (\$100-150) per mt. The cost of Fiskobirlik's export price was a bit higher due to the high processing cost and the base product price. Regarding the processing cost, Fiskobirlik's cost could be twice as much as the processing cost in the market. However, such a high difference is also related to the pricing policy of the exporters who want to show their cost of

processing as low in order to provide better price to the importer. As far as the base product price is concerned, Fiskobirlik's purchase price was mostly higher than the spot price.⁹³ Moreover, the spot prices can be manipulated by the exporters through their network relations to provide lower prices. Nevertheless, the largest importer also may have found it advantageous to purchase hazelnuts from Fiskobirlik even at higher prices in a given crop season. The reason behind this would be to avoid purchasing hazelnuts from the market with the idea of preventing price increases in the following months as well as speculation.

From the time of contract to delivery, the exporters may generate profits in a number of ways. The profit added to the base price includes the cost of the financing of the exporter during the period between the date of payment to the local suppliers (i.e., crackers, grocers, merchants and even exporters) and the date of payment by the importer. This profit thus covers the operating expenses of the exporter and the profit margin of local supplier.

To increase the profit, the exporters may purchase hazelnuts at a price that is lower than the forward price. Also, the exporter may keep the cost of processing lower than the agreed upon processing mark-up. However, decreasing the processing cost may also cause a decrease in the quality of the hazelnuts, and thus, there is a risk

⁹³ However, in the 1970s, when there was no problem of excess supply and when Fiskobirlik was a powerful export actor, the market prices were set higher than the purchase prices in order to purchase hazelnuts and to prevent the export power of Fiskobirlik. The head of Başkan Gıda wrote in his diaries the 1977-1978 crop seasons as follows: "In September 1977, in parallel to the price increases abroad, the private sector started buying hazelnuts at a price that was higher than the purchase price. This led to the stopping of the hazelnut submission to Fiskobirlik and also resulted in the export fund of 2 TL. Following increases in world prices, the amount of funds increased. In the 1978 crop, the base prices were set at 21.2TL. Yet, since the private sector started buying hazelnuts at around 22-23, Fiskobirlik again became alarmed and proposed that the Ministry of Trade give the price difference to the producers. Fiskobirlik's proposal states that "In light of the recent market developments, it is required to prevent the hazelnuts from passing into the hands of merchants, intermediaries and usurers in order to meet the producers' labor and to provide the effectiveness of Fiskobirlik and to be able to execute the Fiskobirlik's commitment toward the external market... The private sector, which provides high fund revenues by offering the producers higher prices than the purchase price, was connoted as intermediary and usurer. This is the bizarre and bothersome mentality of Fiskobirlik."

of their being rejected by the importer. When hazelnuts are rejected by the importer due to poor quality, the exporter is responsible for paying the cost of transportation.

Nevertheless, the exporters execute not only the trade and export of hazelnuts, but also its cracking and processing. Also, they may purchase hazelnuts directly from the producer, as the exporters measure the yield level, as opposed to the intermediaries, who do not or randomly measure the yield. However, the exporters mostly execute their purchases with their intermediaries.

The exporters are in a more advantageous position than that of the market actors, who are not involved in the export and price formation process. They have thus a double-sided profit, in both the local and global markets. At the global level, the exporters generate fixed profits based on each wagon transaction. The profit of the exporters depends on the volume and the number of wagons. At the local level, as they involve into the making of the spot prices, they acquire profit from the differences between the forward or export prices and spot prices. However, their power is not boundless. The boundaries will be analyzed in the following sections.

Hazelnut Price Formation

The market price is identified as the first price in a given day executed in the market. This is the first transaction or deal in the market. This price becomes the reference price of the prices that are executed in a day. Since the price negotiations are performed among the exporters at the local, the spot price makers are mostly the exporters. If one exporter closes a sale at a given price in a given day, this price becomes the market price. As the selling includes two parties, if the buyer agrees on

the given price, any seller might become the price setter. As the actors in price formation are the exporters and importers, these are the actors who execute the OTC prices. The motivation of the exporters depends on the importer's motivation. In the case of the exporters, these groups often act in cooperation with importers, who are the ultimate buyers of the hazelnuts. The motivation of these groups is to provide a price that is the lowest possible. To achieve their target, they have to ensure the required amount of supply.

Taking a glance at the price formation, the expectations of the hazelnut traders depend on the number of buyers and sellers. The market actors informed me that the price is determined simply according to supply and demand "Our customers, buyers, and competitors call. When one gives a more appropriate price [*if the transaction is completed*]; this becomes the price."⁹⁴ According to them, in the daily market setting, if the number of sellers (supply) is higher than the number of buyers (demand), the market price is in a trend of increase.

In a given day, for instance, the price of current crop for 11-13 is 7.1 TL and the price of 13-15 is 8 TL, whereas the price of new crop is 6.2 TL for 11-13 and 6.5 TL for 13-15. The new crop might be loaded, for instance, one month later, yet, the current crop will be loaded immediately. The argument is that based on the expectation of a high supply of the new crop, which means prices will be high as well.

This demand and supply rational is related to the position and attitude of the traders. One international hazelnut broker explains that market prices decrease if the sellers in Turkey are bullish; then selling is accomplished. If they are not bullish, then the hazelnuts are not sold until the final price has been set. However, it is not the

⁹⁴ Based on the notes of the in-depth interviews.

supply and demand mechanisms that determine the prices, but the expectations of traders.

This section provides an analysis of the price formation. First, the trading relations of Ferrero are analyzed in relation to the company's purchase and supply policies as well as its role in the constitution of the price making mechanism. Second, the local perception that "the prices are formed in Hamburg" is analyzed. Third, the creation of forward prices is explained. The fourth part analyzes how spot prices are created. Fifth, the role of the brokers is identified during the process of price formation. Finally, three case studies are analyzed to explain the pricing processes.

The Role of Global Players

Ferrero is the largest hazelnut importer in the world. The company has two different supply policies. The first policy is to acquire the new crop as soon as possible to be able to keep its quality standards. The second policy is to acquire as much of the old crop for future stocks. Regarding the first policy, Ferrero aims to acquire hazelnuts during the early time of the crop to be able to keep the product as fresh as possible and to avoid any quality losses.⁹⁵ In each crop season, the company aims to complete the rapid delivery of hazelnuts to its storage facilities located throughout the Europe. The rapid delivery is also related to the attempt to avoid any possibility of a seller's market. As far as the second is concerned, the target of the company to stock hazelnuts in different countries is to increase their hazelnut supply and to avoid being

⁹⁵ The product quality is based on freshly roasted hazelnuts. Also, the company is positioned and differentiated itself with its product quality to be achieved by using fresh and careful selected ingredients.

dependent on the local suppliers. The company continues to expand its storage facilities to be able to increase its stock of old crop.

In light of these policies, Ferrero, within the framework of its Hazelnut Business Development policy initiated in 2006, purchased lands to cultivate hazelnuts in Georgia, for instance. According to the Report Document, Ferrero's policy "develops its strategy by identifying and purchasing land where hazelnuts can be cultivated and processed through its own techniques and resources, but also by supporting third-party operators intending to independently develop cultivation projects, in particular by selling them different varieties of selected hazelnut plants at cost prices and by providing them with technical and agronomical consulting support" (Ferrero CSR Report Chapter 7, 2010).

The supply policies of Ferrero are related closely to its price policy. The company enters into a strategic relationship with a couple of exporters. With the aim to avoid competition between the actors in the local market, the price executed between Ferrero and its strategic partner is meant to satisfy both parties.

The strategic partnership policy of Ferrero is based on the maintenance of product quality, on-time delivery and stock availability. This is not a kind of merger or established associate. Instead, this is a strategic contact that depends on any market condition and any circumstances. Oltan Gıda, for instance, which has been the market leader since 2002, operates a separate establishment with heavy investment in machinery and equipment that only work for Ferrero. The company manager told me that "nothing is guaranteed...there is nothing we can do" if Ferrero says in the future that "after one year, I won't buy from you".⁹⁶

⁹⁶ Based on the notes of the in-depth interviews.

The Ferrero conduct frequent visits to their strategic partners. They also conduct field work in the hazelnut orchards to be able to acquire information about the crop, quality and general market conditions in the local market. The main requirements of the company from the exporters are on-time delivery and the fulfillment of quality standards through developed laboratory testing. In Turkey, the standards were initiated in March 2002 according to the TSE3075 standard of the Turkish Standards Institute.⁹⁷

The hazelnut purchases are conducted over phone conversations. During the crop season, which is the crop season from August to December, the telephone conversations usually take place weekly, daily or even a couple of times a day. When Ferrero decides to purchase hazelnuts, the company gives a call to the exporter to express its demand to purchase hazelnut. However, the company always discloses the amount of hazelnuts that the company is in need of. The company specifies the particular type of hazelnut without mentioning about the total amount of purchase. At that stage, both parties negotiate on the spot prices at which the exporter would purchase hazelnuts at the local market.

When the exporter receives the order, he starts seeking to buy hazelnuts at or around that price, until a sufficient quantity has been purchased to serve as the basis for a Ferrero order. The strategic partner of Ferrero sends daily reports that include the amounts of hazelnuts purchased of the relevant type, the price payable and quotes the average currency conversion rates for Euros and USD for that day. These reports vary for each hazelnut region. The exporter reports to Ferrero over the phone about the daily data. One example of these reports is as follows (EWHC, 2009):

⁹⁷ Based on the notes of the in-depth interviews.

Considering the amount of hazelnuts coming from growers will be less during Ramadan, we think that the market will remain at the same levels as today's with slight increases and decreases until the new year and starting in January the market will be easier, and later, from March 1 to May 1 will be lower, even below Fiskobirlik's purchasing price, and that even without having any money Fiskobirlik may receive goods from growers.

Also the situation of 2002 crop for this moment looks to be quite good on the basis of male flowers. Even there was some talk in the market that the male flowers were less. Of course, the developments in the new crop season are important for us and for the market; and need to be followed.

Dear Casale, as we discussed, we would like to confirm that we can do 17,000 – 18,000mt by the end of February 2002, both for Rocher and Pasta. As mentioned, we would request that around 2,000–3,000mt Standard be shipped during April 2002 and if possible May 2002, the finalization of the contract of which we can discuss at this time if you would prefer.

In light of these reports, after the completion of the purchase of an unspecified but sufficient tonnage of hazelnuts, the exporter and Ferrero agree with “the finalization of the contract” in April and May on a few orders that are not to be delivered yet. Ferrero also creates reports in relation to the market conditions in general. These reports include the trends in the nut sector, the price changes, the stock conditions (i.e., the current price versus the unsold quantities) the position of the regulatory institutions and the producer's positions.

At this stage, the exporters regularly prepare price calculation documents that summarize the purchases and daily reports so that the average price paid for the aggregate tonnage in Turkish lira is identified, together with the average conversion rates into Euros and dollars during the period in the purchases is made. To those purchase (spot) prices, the exporter adds mark ups, which include processing costs, export tax, export cost and profit, to produce a total price payable by Ferrero for each type. The mark-ups differ for each type of variety and specification of hazelnuts supplied in terms of the type and characteristics of hazelnuts in Ordu and Giresun as well as in West and East Black Sea.

On the exporter side, the acquisition of the required type of hazelnut at the same quality at the same time at the agreed price requires a well-managed network and thus supplier relationships. While accomplishing this, the exporter does not give up on the prices agreed with Ferrero. The price calculated between the two parties generates a mutual gain for both parties. The prices at which it is to be sold to Ferrero based upon arm's length bargaining, which ensures that the exporter does not apply additional profits besides mark-ups (EWHC, 2009).

Ferrero cannot control the prices at which the exporters purchase hazelnuts from the local suppliers. If the exporter stores the necessary amount of hazelnut stocks to be delivered on the agreed time, there is no way for the exporter to make any profits or losses due to spot price and exchange rate movements during the period between the hazelnut purchase date at the local level and the on-sale date at the global level. During the crop season, Ferrero orders in large quantities in a short period of time.

After receiving the final order, each party prepares contractual documents. The contracts to be sent via email or fax include the order instructions, which include quantity, type, specifications, delivery period and other details (delivery method, package size). The chain of orders from Ferrero in a given year might be exemplified as follows (EWHC, 2009). This shows how the price increases are reflected on the price trend for the crop season from October to November (Table 13).

Table 13: An Example of Ferrero Purchase Orders

Quantity	Type	Importing Company	Date	Price
373mt	High quality	Ferrero Germany	18 October	€2,498 per mt
950mt	Ordu quality	Ferrero Italy	11 November	€2,679 per mt
550mt	Levant paste	Ferrero France	11 November	€2,679 per mt
435mt	Ordu and High quality	Ferrero Germany	21 November	€2,782 per mt

Source: Adopted from EWHC (2009).

The exporters struggle to provide a better price for Ferrero. In one of the price communications with Ferrero, Başkan Gıda, the largest exporter in 2000, explained that Başkan Gıda would provide Ferrero a certain amount of hazelnuts purchased from Fiskobirlik and noted the following (EWHC, 2009.): “Please find below the calculation for Ordu Quality for Italy, Germany and France. As we discussed, I would like to confirm that we agreed with Fiskobirlik that if Fiskobirlik reduces their price for the 2000 crop before end of the current crop, we will get the difference and, as I confirmed on phone, we will get this difference back to you.” For any attractive price difference, the difference is transferred in favor of Ferrero.

This is a kind of *pegged price* at which, first, the forward price is fixed, and second, it is fixed not by agreement (i.e., forward contract), but by an oral promise. This is a derivative deal based on a derivative forward contract. As such, with one further sphere in pricing, there appear forward and pegged price. First, with the forward price, the spot price is fixed based on an expected price (i.e. the spot price in the 2000 crop season). Second, with the pegged price, a forward price is fixed based on the possibility of a future event (i.e., the price decrease by Fiskobirlik). In both

situations, the prices, conditions and possibilities are not certain. However, uncertainty is not unknown, but it is the ability of the exporter to interfere in the unknown. This is the ability that allows the exporter to be determined and to abide by the promise.

This situation has two implications. First, the market is not a place in which prices are executed by *invisible hand*. The visible hands of the market intersect with each other in different spheres with different expectations. Therefore, there are no free buyers and sellers. They are interdependent on each other. Moreover, although this is an informal network relationship based on trust, this is a one-sided trust (of the exporter) based on the bargaining between the global buyer and local supplier. The above-mentioned example shows how important it was for the hazelnut king to become the biggest supplier to the largest importer. On the importer side, it is important for Ferrero to ensure that the exporter maintains the price at which it purchased the product before the delivery.

Second, the anthropology of price making uncovers different aspects of pricing in which different configurations of power relations and interactions between the market actors are created with diverse expectations and motivations. These are the prices constituted by the perceptions of the market actors. Such a multiplicity in pricing depicts how market agents intersect in multiple ways (Çalışkan, 2007c). As the prices are produced in different areas with different expectations, the gap emerges between the price set globally and the price executed locally. Although Ferrero does not have an impact on the spot prices directly, such a gap reveals mistrust and hostility against the price setters (i.e., firms as intermediaries and exporters). The next section explains how the local perception that the prices are

formed on the Hamburg Bourse is misled.

Are the Market Prices Formed in Hamburg?

In 2007, I visited the Hamburg Bourse, or Waren-Verein, in Hamburg. The institution is a national association that represents the interests of foreign and wholesale trade for a number of product groups including hazelnuts. The institution informs its members about the national and international regulations and legislations. More importantly, the association also acts as an arbitration mechanism to fix the commercial rules. The association does not have direct control in the pricing of hazelnuts (Waren-Verein, 2012).⁹⁸

I met with T.H.R., a member of the board of Waren-Verein. He is also the managing partner of Pisani and Rickertsen, a hazelnut trading company founded in 1905 in Hamburg. Pisani and Rickertsen provide a consultancy service on the hazelnut trade including logistics, market information, statistics, product development and risk analyses. Haas-Rickertsen has been working in the hazelnut business since the 1970s. In 1988, Pisani and Rickertsen founded Progida with the partnership of U.Ö., a leading hazelnut trader in Turkey. In December 2010, Pisani and Rickertsen, with the partnership of U.Ö., founded the THR Hazelnut Trade and Storage Ltd. to develop hazelnut storage facilities in Turkey. This objective was in parallel to the Hazelnut Business Development policy of Ferrero, which is also a customer of Pisani and Rickertsen. In 2012, the Olam Group acquired Progida, and

⁹⁸ The Waren-Verein der Hamburger Börse e.V. “founded in 1900 as Association for the promotion of Hamburg's trade in colonial produce, dried fruit and drugs (Waaren-Verein); renamed in 1962 into Waren-Verein der Hamburger Börse e.V. and expanded to promote the import trade with canned goods, deep-frozen products, dried fruit, edible nuts, spices and honey as well as enlargement of scope to cover the whole Federal Republic of Germany determined to stand for freedom of trade throughout the world - for the benefit of its members and all consumers” (Waren-Verein, 2012).

Progıda became the Olam Group Company.⁹⁹ U.Ö., the president of the Association of Istanbul Hazelnut Exporters and Hazelnut Promotion Group, is still on the board of Progıda.

In 2007, when I met with T.H.R., he provided me the general and historical information about the hazelnut import. Mainly, he mentioned the constant price increases since the 1980s and how difficult it was to overcome such increases. At the end of our meeting, when I said that the reason for my visit to the conference on the welfare state, he said that “the welfare of the hazelnut producers is high, don’t worry.” Apparently, despite his stance, which is similar to that of the exporters, his point of view as an importer was interested only in the artificial increase in prices due to the purchase prices, price instability and the uncertainty in the price policies. He complained about the increasing and unstable hazelnut prices since the 1980s (Figure 12).

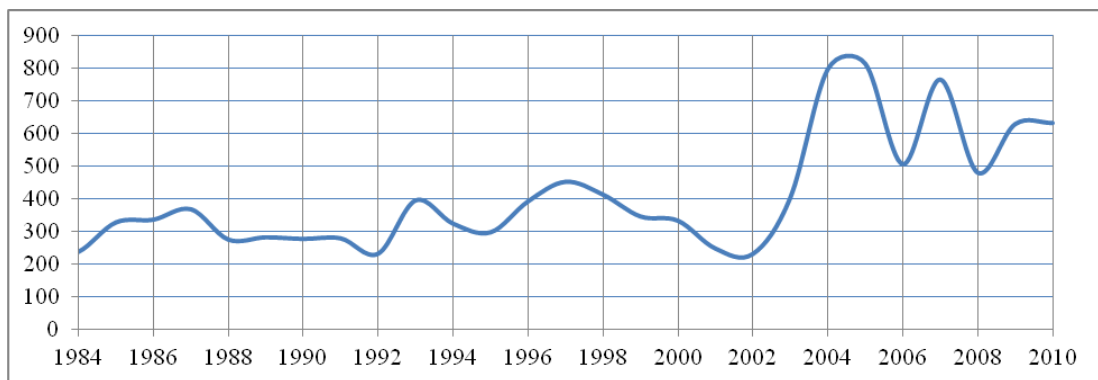


Fig. 12: Hazelnut Export Prices from 1984 to 2010 (USD/kg)

Source: Commodity Exchanges, Black Sea Exporter’s Union

⁹⁹ The Olam Group Company, headquartered in Singapore, operates on-site sourcing and processing facilities and has a presence in the countries that are the leading producers of cocoa, coffee, cashew, sesame, rice, cotton and wood products. According to their official website, the company “handled 8.5 million mt of products for a sales revenue of S\$15.7 billion” in 2011 (Olam Official Website, 2012).

The market actors on the ground including intermediaries and producers believe that the hazelnut prices are formed by the Hamburg Bourse, based on the idea that the prices are dictated by the hazelnut importers, who pursue lower forward prices. Forward pricing is perceived as unethical and as a betrayal by the producers negative opinion about the exporters due to their forward contracts can be seen into the local expressions to affect spot prices to decrease. As such, many of these agents call the exporters “dummies” or “stalking horses” of the importers. These expressions imply that the market prices are intentionally lowered by the importers and exporters. As the decreasing prices are dictated by the importers, the exporters act as the “little masters” of the importers. These pejorative expressions are derived from the speculative actions of some exporters.

Although the big sellers and buyers control and manipulate the prices, this is not a sole determinant of prices changes. The prices offered by the largest importer at the first initial contact are open to negotiation between the importer and exporter. It is not the largest importer’s intention to speculate on prices; rather, the importers pursue stability in prices. The price speculations that cause the prices to decrease are realized in the local market. Therefore, I conclude, against the argument that “the prices are formed in Hamburg,” that the hazelnut prices are formed in the local market by the inclusion of both global and local agents who are importers, exporters, intermediaries, formal institutions and producers. The rest of the chapter analyzes the impacts of these market agents on prices.

The Creation of Forward Contracts

I conducted in-depth interviews and participant observations with numerous exporters. The market and field analyses on price formation were conducted during the periods before and during the crop season. Through the participatory observations, I now will explain how forward prices are formed.

The local exporters and local brokers as well as importers and foreign brokers with whom I worked did not try to disguise their pricing decisions and they trusted that I was using such specific knowledge for an academic purpose. The contacts with these exporters were based on the long-term relationship established during the field work as well as through the references from the formal institutions that represent exporters.

The exporters are mostly factory owners with developed processing, cracking, control, storage and transportation plants. These companies are mostly owned by two or three family members. Mostly, a shareholder or a qualified employee who knows English is responsible for the pricing processes. The market for an exporter opens at around 9:00 in the morning and continues until the afternoon, yet the period from 10:00 to 13:00 requires intense concentration on ongoing calls, time and time again. I witnessed this stressful time slot especially when the exporter was at a point to close a deal.

The Nature of Forward Contracts

The main reason for forward contracts is to “mitigate the market power” and “to enhance spot positions” (Allaz and Villa, 1993). The formation of forward prices

starts with estimations on the future crop. The motivation of forward pricing is thus fashioned by risk perception, yet the expected prices might both create and eliminate risks. Therefore, there is no guarantee that the expected prices might be close to spot prices for future exchanges.

On the importers side, they avoid higher prices during the crop season by insisting on dealing at lower prices earlier. On the exporter's side, they make a deal so as not to lose the sales potential created by the large importers. The mechanism of forward pricing is applied due to high competition among the exporters, excess supply, the small number of buyers (importers) and sellers (exporters), and the nature of the agricultural product influenced by climatic changes. The forward pricing thus targets selling more, drawing customers and positioning against the competitors.

The pre-sellers have to buy the required amount of hazelnuts to load at the time specified in the forward contract. The importers select the product from the exporters on the basis of the requirements of logistics, quality and stock availability as well as rapid delivery and attractive prices. If one exporter fails to deliver the agreed amount of hazelnuts on the agreed terms, his reputation is damaged. The big players are strict and professional in terms of the fulfillment of the terms. One exporter said that the "large importers do not purchase product from *this* type of traders because when the (spot) prices increase higher than the forward price; they do not load the product on the agreed date or at the agreed price".

Forward price is not only executed between importers and exporters. When the largest exporter looks for the hazelnut supply for the importer, the price given to the exporter by the intermediary might be a forward price although the largest exporter does not provide a forward price to the importer. The risk of forward belongs to the

intermediary; nevertheless, if the hazelnut supply agreed on to be provided by the intermediary is in large quantity, the risk of forward also affects other market actors.

The survival of the exporters is based on their forward promises. Therefore, they attempt to protect their position in relation to their forward commitments. If, for instance, the producers resist bringing their products to the local market, the exporters aggressively increase the prices to find hazelnuts. The exporters, who tend to guarantee themselves against the possible risks of forward, have to deal at higher prices. The reason is to secure the profit due to high forward prices against possible high purchase or spot prices.

The forward price formation includes a variety of determinants, such as crop level in various countries (i.e., Turkey, Italy, Spain, Georgia, and Azerbaijan), weather conditions, production conditions (i.e., production, harvesting and transportation costs), attitude of producers (i.e., amount of product coming to the market, the demand of producers for higher prices, the share of *emanet* product), behavior of exporters and importers (i.e., share of forward sales to cover the lowest price possible), and buyer's resistance to the high offers of sellers.

However, these calculations and estimations cannot be materialized in price formation due to uncertainties. The exporters said that there was always uncertainty in the market. In relation to crop level, one of them specified, for instance, that:

Uncertainty comes in the following way. For instance, I look at the hazelnut flowers in February, and see that they are gorgeous and will yield enormous product. Then, I sell it at low prices, yet when it comes to May during the time of fertilization, there is no product to fall out. There is always uncertainty. Again, it comes along well but in July there is very hot weather, it [*hazelnuts*] has gone.

These estimations based on uncertainties are the market devices that provide the market actors an impression and intuition in their behavior of pricing. The concrete act of the price setters in the daily life of the market is based on their estimations and their ability to manipulate the spot prices. As such, the forward prices are derived from the power execution of the price makers and their estimations of the ability to use this power. The power is materialized through personal struggles, competitive attempts, risk taking, and rumors.

The exporters struggle to keep the price as low as possible due to the competition for access to more customers in advance and the limited demand capacity (mostly the European market). Forward is thus perceived as compulsory by the exporters to create priority in order to overcome the high level of competition among the exporters, who struggle to sell the greatest amount of product to a small number of buyers. As such, as a sign of herd behavior, most of the exporters said “everybody does that, why shouldn’t I?” They are in the position of being able to be in a position to undercut its prices, like acting in a buyer’s market.

When an exporter enters into an forward contract with a series of long-dated orders, at the beginning of the year, around February and March (when the hazelnuts blossom), the order is placed for big quantities, for delivery in a long period of forward time and at prices that might result in losses in that the spot prices might be high in the crop season. Therefore, starting around February, the exporter is in a position to have cash money to secure the necessary supply chain.

The impact of the importers on price decreases might be related to the amount of hazelnuts that the importers attempt to buy. A continuous buying or selling behavior, which reveals long or short position, respectively can shift the market trend

as well as the behavior of follower exporters. Despite that this *powerful* exporter tends to purchase product in advance at lower prices, this attempt cannot be the only determining factor in the decrease in prices. One exporter said, “There is no such power to play with hazelnut prices.” Nevertheless, the powerful side determines the market trends on either the buyer’s side or the seller’s side. Such a powerful position, especially in a stagnant market, leads the sellers to offer lower prices by 1-2 digit decreases.

A speculator may attempt to purchase at higher prices in order to wait three to five months instead of taking positions according to the daily price changes. Despite uncertainties and risks, speculators also can earn a considerable amount of revenue. However, following the 2004 frost, not only the hazelnut kings, but also other speculative forces were eliminated due to severe bankruptcies and the changing positions of international buyers who sought direct contact with the local exporters as well as the elimination of numerous intermediaries, including seasonal factories, speculator brokers, merchants and grocers.

In some cases, with a dramatic short speculation, the exporter might offer lower forward prices with the motive to maintain its position as the largest exporter in the market as well as to eliminate its competitors. If the market leader does not give up the guaranteed or contracted prices, other price setters have to be in a position to cut prices. The largest importer, for instance, starts purchasing hazelnut in large amounts; there is a market recovery due to intense communications, bargaining, searches for better prices and qualities and more importantly due to an expectation to find a customer in a small and limited market. The recovery is also related to price increases, yet after the completion of large sales, the prices stand at high levels a

little while and then, if there is no any other buyer, decline slightly.

However, it is not common to create forward contracts at lower prices than the spot prices. The dramatic decreases in spot prices are related to a speculative short position with the aim to decrease the price. The speculative activity might be in reaction to events such as a political speech, estimation of amount of crop or of support purchase prices. If, for instance, the exporter is in a significant speculative short position in the local market, taking a bullish position, the exporter starts acquiring hazelnuts. Therefore, the position shortens the expectation of a late season fall in prices. In a short position, the speculator expects a fall in the market between contract and delivery and generates profit by buying the necessary amount of hazelnuts at a lower price to sell in the future. For instance, the Prime Minister addressed the producers at a public meeting in Giresun on June 18, 2006 and Ordu on July 09, 2006. During his speech, he criticized Fiskobirlik for “exploiting state funds” and the lack of appropriate pricing policies. In the following weeks, the spot prices fell from 3.73-5.50 TL in June to 2.4-2.9 TL in July. The decreases in prices prove the fragility of the spot prices and to what extent the prices are vulnerable to the speculation of the price setters (Figure 5).

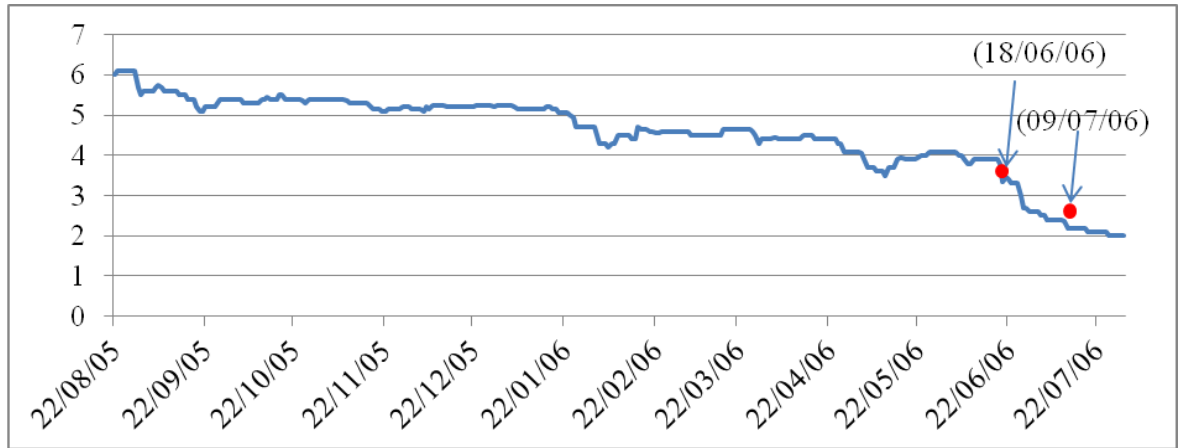


Fig. 13: The hazelnut price decreases in 2006

Source: Fiskobirlik.

The price calculation is very simple and fast in hazelnut. Every market actor acts according to his own rules yet it is not a process that is manipulated by a single actor. If there is a high probability to buy unshelled hazelnuts, for instance, at 3 TL, then the exporter adds the costs and profits on the wagon price and determines the forward prices, as \$441 (Table 14). The exporters are the market actors who set forward prices.

Table 14: Simple Calculation of Export or Forward Price from Base Prices

Price of unshelled hazelnut	3.00
Price of shelled hazelnut (after cracking)	$3.00 \times 2 = 6.00$
Export Cost	$6.00 + 0.35 = 6.35$
Wagon Price (10mt)	$6.35 \times 10,000 = 63,500$
Profit	2,000 TL
Total	65,500 TL / \$ 44,107
Price of 100 kg hazelnut	\$441

Source: Based on in-depth interviews

The exporter will be in a difficult position if he is not able to provide the necessary amount of hazelnuts from the local market. Therefore, the forward price is based on the exporters' expectation of the spot prices and their ability to manipulate them.

Toward the crop season, the forward prices start to decrease as the price setters are in a position to wait to see the spot prices for the new crop.

Estimating Future Spot Prices

The exporters enter into a contractual relationship with global buyers at an estimated price for a certain amount of crop to be delivered at a certain term. The forward contracts are completed when the global seller delivers the product at the agreed price, amount, quality and time. The payment is made following the delivery; hence, complete and on-time deliveries are crucial for the exporters, factory owners, crackers and intermediaries as a sign of trust.

Delivery of the product to the marketplace takes place throughout the year, yet it might be said that the crop season takes place in August-September-October-November-December, during which around 60 percent of the product comes to the marketplace. Since the time considerations in contracts are mostly fixed to certain delivery options, pre-sellers have to purchase the contracted amount of product from the local market from the last month that the forward contract obliges them.¹⁰⁰

However, the agreed amount of crop is the future crop; thus, the exporters sell a crop that does not exist yet at the time of the forward contracts. What changes the prices is derived from the market and expectations; one exporter defined forward pricing as “selling expectations” instead of the real product. Therefore, the exporters always try to estimate future prices in relation to the amount of crop, the behavior of the producers and purchase prices.

The estimations of the exporters can be seen in calculations and statistics. Considering the crop, when hazelnuts appear on the branches, they visit the orchards to count *zulut* and carnation, and to learn how many of them have fallen off, and the general amount of product. The second counting is conducted at the end of June and the last counting is conducted at the end of July.

The intuitiveness of the exporters also plays a large role in pricing. This intuitiveness may give shape to the market in a way that although an exporter closes a sale in an intuitive way, this price becomes the market price. Also, this market price also becomes a reference price for the following transactions. Nevertheless, the intuitiveness does not guarantee that the market prices will remain the same or stay at the desired level. While one exporter shared his intuitive expectations and past

¹⁰⁰ In general, it depends on the time when the forward contracting is made and thus the delivery time, i.e., changes from November to February.

experiences with me, at the end of the crop season, I realized that his estimations had not been realized. He said,¹⁰¹

In general, according to the statistics, high volumes of product come into the marketplace during the months of September-October. These are the times that prices will make a deep ... I will wait for the deep ... Not the least deep, but near to the deep. You said nobody will find a deep? In fact, it's difficult to find a dip ... In recent years, I told you that it all of product was purchased for under \$400 and stocked. My argument became true and the position has always become positive, and last year, from the beginning of the season, I went through the positive position, not that much but always. I'm not sure about the dollar value, but the prices will be more that \$500 in the following days.

Nevertheless, not every exporter conducts forward regularly. It depends on the personal motivations, past experiences, networks, demand linkages, storage capacity, market penetration and selling guarantee. There are always risks in forward pricing. During the fieldwork, an exporter I worked with just before the launch of a new crop season had been conducting forward based on forward pricing. He said that:¹⁰²

I'm now selling because I'm seeing everything. There is no reason to wait for the formation of the actual market, no state involvement this year, there are some factors to be considered, there is this amount of crop, and everything has been knitted. The hazelnuts have not been picked yet, but there is no catastrophe that might happen after this.

However, in 2009, the exporters, who always estimate prices, got into trouble during crop season due to the unexpectedly low amount of crop. Taking risks is related to estimations and those who regret their positions in forward contracts say they do not extrapolate. Those who do not take risks might take protective measures and guarantee, for instance, their stock position by putting the necessary amount to be

¹⁰¹ Based on the notes of in-depth interviews.

¹⁰² Retrieved from notes on in-depth interviews.

transacted on the same day. They might also guarantee, for instance, their equity, if they do not use bank credit, through bank forwards.

Against exchange rate fluctuations, the exporters may apply to forward agreements to the banks (i.e., forwards, letter of credit, documentary collections, open account, or acceptance credit). Currently, most of the exporters guarantee themselves through bank forwards and determines the forward price on the basis of the spot price by adding the forward interest rate applied by the bank. Therefore, they guarantee the stock at a determined price.

The bank forwards are the most frequently used foreign trade tool by exporters in order to reduce the risk of change in currency exchanges and the increasing spot prices at the time of delivery. If, for instance, an exporter sells a product worth \$1 million at the exchange rate of \$/TL 1.45 to be loaded five months later, then, the exporter makes a bank forward in the amount of \$1 million at the time of loading at an exchange rate that is likely to be higher than \$/TL 1.45. Therefore, there is a currency profit that might be generated through currency forwards. If, for instance, the exporter who opens a position without making a currency forward has to be ready for any currency fluctuations. Then, this creates risks.

Daily Spot Prices

Daily spot prices are executed for hazelnuts that are available at the time when its price is to be formed. The buyer makes a deal with a seller who gives the most appropriate price, which becomes the market price. A buyer might be a seller at the same time. This is the price of a physical product that is available in stock.

The daily spot price may also be the export price. The price might also be the last price of the previous day; the price setters explain the spot price as the price where the supply and demand balance is met.

During the crop season, when the spot prices for the new crop are realized in the local market, if the spot prices are higher than the forward price (i.e., due to low amount of crop, the producer's resistance to sell their produce, high support purchase prices) the exporter has estimated, they attempt to purchase at lower prices. The manipulation of the spot prices starts at this stage. If the spot prices become higher than the forward prices or the forward price decreases due to the exchange rate fluctuations, the exporter bears a loss.

It is not the supply and demand balance that determines the price. The price setters do not consider whether the balance is met when they form the prices. Moreover, there is not an automatic system that matches the supply and demand at an automatically generated price. Therefore, the supply and demand balance is based on the expectations and the assumption that the price is based on the number of seller and buyers. In fact, the so-called balance is one factor that makes the market actor consider the direction of price level, whether it is in a decreasing or increasing trend.

Price setters want to know whether there are sellers available in the market or not. If there are some sales, they want to learn the execution price of the last sale. They ask each other "how is it going? How is the situation?" There is a rapid flow of information and communication to obtain one of the best prices that range within a narrow margin. Therefore, the rapid increases or decreases in prices come into being only due to unexpected conditions, such as government policies, the producer's reluctance, and the amount of crop. According to a simple supply-demand

explanation, if there are 10 buyers but 9 sellers, the price increases. On the contrary, if there are 10 transactions but 12 sellers, the price decreases.

If the number of sales is low in the market, the market is called “quiet” in the corporate market reports. Quietness means there is not a considerable volume of sales and there is no active involvement in pricing. The quietness also means no phone calls, which proves the lack of attempts of market actors to acquire price information. In this quiet market setting, an importer suddenly might make a call and propose a price by giving a time option that is around 1-2 hours, then call back and ask what the given price is. Likewise, the importer might also ask prices from other companies. Then, the exporter starts searching for the price given by other price setters. During this time slot, there is a high competition between the exporters and this may lead to decreasing prices. If, for instance, one exporter proposes a given price, due to high competition, another exporter or broker may propose lower prices.

If there is a high demand, the buyers might change the price many times a day. In this high demand situation, a trader may both purchase on the one side and sell on the other side at the local market. The price at which he purchased one unit may be different when the second unit increases; then, if there is more demand, since he cannot buy the second purchase at the same prices as the first one, he has to increase the price. Hence, he compensates one part with the other. If the price of 11-13, for instance, is 7.0-7.1 TL in a given day, a buyer might offer the price of 7 TL and sell at 7.1 TL. The other price setter might offer the price of 7.0 TL or 7.1 TL. Although there is no need to buy, but if one seller offers the price of 6.9 TL, the buyer may decide to buy at this low price. The exporters have the power to decrease the prices in that sense. If especially the price is in a decreasing trend, the exporters may

decrease the prices dramatically. The competitive position of the exporters leads them to decrease prices to protest their competitive edge.

There are also other actors who buy and immediately sell (so-called *al-satçı*) at spot prices with a small profit margin. There might be one buyer, but 20 sellers, and he might obtain offer from 10 sellers, for instance. A buyer may offer a price of \$500, but the immediate buyer may offer a lower price of \$495 or between \$495-500. Then, the buyer may choose the offer of the immediate buyer's low price.

The exporters make an estimation of the amount of product that will come into the marketplace, then if the amount is small, although the daily price is 7 TL, for instance, the buyer might say that the price is in an increasing trend and the prices might become 7.1-7.2 TL; the buyers who purchase unshelled hazelnut increase the prices to be able to purchase the product.

Commodity Exchanges

At 9:30 AM, I went into one of the Commodity Exchanges in one of the hazelnut cities and saw that no price had been set. The General Secretary informed me that, in the meantime, the representative was calling some of the price setters to acquire price information. At 10:20, the representative called to say the "first transaction has been realized; it is 3.6 TL and 4.1 TL unshelled." Then, the minimum and maximum prices were declared on the digital screen at the entrance of the institution, such as 3.6 TL and 4.1 TL unshelled. Although the electronic digital screen is used at each Commodity Exchange in each district and city, the price and quotes are negotiated and executed over the telephone.

Therefore, the hazelnut exchange is not a spatial formation whereby the price is formed in these institutional physical settings with the requisite equipment and sales halls. Although the prices seem to be declared by the Commodity Exchanges, the prices are created, formed and shared by the market processes created by exporters and maintained by informal networks. The reference institutions are not the Commodity Exchanges, which are just informed by the exporters and brokers as well as by the behavior of the importers, who are included in the price formation talks each day. Each morning, a representative of each Commodity Exchange in a given city calls a number of selected exporters or brokers to ask the prices.

The prices might vary in different Commodity Exchanges in different cities. It depends on the location and production and distribution structures of each city. In Ordu central, for instance, since the number of factories and exporters is high, their power over price formation is stronger. This means the prices are lower in these places. In Fatsa, a district of Ordu, since there are no factories, the prices might be higher and thus the market is shaped mostly by the grocers and merchants. In these districts, the exporters let their network agents to be able to acquire the necessary amount of hazelnuts from these places. This is also a protection of the intermediaries by the exporters. The higher prices also related to the cost of transaction due to the intermediaries. Therefore, the sources of price information declared by the Commodity Exchanges also may be determining in terms of their position and power in the market.

Forward contracts have to be registered by the Commodity Exchanges on time, yet some of these contracts may not be registered on time. With the Law No. 5174, enacted in 2004, the time controls were removed. Forward contracts are the part of

the trade secrecy of the exporters and they do not want to reveal them publicly.

Although small markets do not allow secrets, the secrecy is created through manipulation, speculation and misinformation. The reasons may be to overcome the competition and to avoid pejorative connotation on forward contracts in the local market.

Support Purchase Prices

The support purchase price was executed by Fiskobirlik between 1964 and 2006 and by the TGB between 2006 and 2009 on behalf of the state. The general impression of the market actors about the support purchase prices was that the prices would have been higher than those of the previous year. In other words, the support purchase prices became the ceiling price as a reference for spot market prices.

Therefore, the support purchases prices were significant in the market in terms of their implication both on forward prices and spot prices. The exporters executed the forward prices estimating the future support purchase prices as compared to the last year's estimated support purchase prices. Each year the exporters estimated the state purchase price. For instance, in a given year, the average of the support purchase prices was 4.5-5.0 TL; and thus the purchase price for the next year was assumed to be more than this price, around 5.0 TL as a ceiling price. Therefore, for the exporter, the spot price was expected to be at 4.0 TL. They executed forward prices based on this estimate. The impacts of support purchase prices will be analyzed in the case of Fiskobirlik pricing in 2005, in the following section.

The Role of Local and Global Brokers

The names of the brokers were mentioned mostly by the global buyers and sellers and market setters. The market works by a simple means of socio-technologies during which the brokers write down the names of sellers and start searching to match them with possibly buyers, or vice versa. These technologies allow for the rapid transfer of information from one agent to another in just a couple of minutes from the local to the global levels. This information transfer is also included in the monthly reports circulated throughout the price setters. The only technology in the process of daily information exchange is mobile phones and 3G. “In the age of the Internet, I can talk live”, as one local broker said. Every agent in the market talks via phone at least five hours a day and some of them told me that they do not want to speak to anyone at home at the end of the day.

The local brokers cannot affect global or forward prices; yet, the global brokers can affect them. The local brokers have a role in regulating the local market, and thus they are the actors of the local level rather than the global level. In the global level, the local brokers do not have any role, yet the global brokers step in by linking exporters and importers. In the local level, the local brokers connect the exporters with each other; therefore, the buyers and sellers are exporters, factories or intermediaries. In several conditions, the brokers become the sources of information to inform price setters about other agents’ behavior. The brokers act like a bridge between buyers and sellers also in terms of procedural issues (i.e., registry, delivery timing, and follow-up).

The brokers might also become key actors in terms of their positioning and

tactics as well as interpersonal, negotiation skills, such as verbal communication and persuasiveness. A local broker, for instance, can hold either a buyer or seller position. In the case in which the local broker holds a buyer position, for instance, he informs sellers that there are no buyers or explains that the market is “a bit crummy.” If somebody is again inclined to sell, the local broker may say “OK, let’s try to sell” and declare a price. The buyer side, however, may reject such an offer and say, “No” and then the local broker says to the seller: “if you decrease your prices a bit, maybe, I can initiate a deal for you at a lower price.” As such, in a market where there is no buyer, the local broker can say, “let’s give a price and let it go,” and then close the sales. In some cases, the local broker might purchase at a higher price for buyers, yet in following transactions, they compensate the losses of such buyers. Such deals in some respect might also suit the exporter’s interest.

There are only a few local brokers working in the hazelnut market. When I went to Ordu, I started to look for one local broker who was very well known by the exporters. I was thinking that I could reach him immediately by asking the grocers and merchants located in the streets of Ordu Centrum where the hazelnut market is lively and active marketplace. However, none of the merchants and grocers was acquainted with this local broker. Only, when I asked the name of the local broker to a cracker, he immediately said that his office that was right in the town center. The reason for the ignorance of merchants and grocers is related to their no effect on and isolation from the price formation process.

When I reached the local broker’s office, I found myself in old building. He was a tubby, skeptical man, looking with curious eyes, but also someone appearing guileless. He first tried to learn about me, asking, “Where are you from? What is

your connection with Ordu? Do you have acquaintances here? Where do you stay here?” Thereupon, I gave him many reference contact names, which would vouch for me them. In our second meeting, he told me he had asked these references about me and had received positive feedback. After that, he started talking with me in a welcome manner. I met with him many more times thereafter.

The local brokers are known by the producers as accountants. The local brokers are paid 50 TL per agreement by the seller for each transaction between 30-50mt. The local brokers do not work with merchants and grocers. They work with the exporters and have a role to shape the prices. Even if the local brokers are involved in the market and price processes, they are of the local market constitution, as they do not have the power to execute the prices.

The brokers may have knowledge of credit financing of the price setters and inform others. They possess information and market knowledge from different sources and use these details as an asset. The information may be critical in terms of the direction of prices. For instance, the bank credits of the exporters are important to understanding their debt position. The brokers might be intermediaries and negotiators of the price setters in order to help them overcome market speculations. In one case, for instance, at the local market, the spot prices might be speculated by a price setter who purchases large amounts of hazelnuts to decrease the spot prices. The price setters may put hazelnuts into the market by private bargain [underhand, *el altından*] through, for instance, Fiskobirlik or any other sources. The price setters may achieve to decrease prices at which he purchased below 1 or 2 points by also purchasing product from the speculator. During this process, a broker might be asked to be involved in. However, such an involvement can be understood by other price

setters and create mistrust against the broker.

One local broker identified such tactics as ability to “belly dance” by twisting around digits. If, for instance, there are five exporters that give the same price and one seller wants to sell at a nearest wagon at the price of 70 TL¹⁰³ (he knows that the price of 71 TL will bring him a profit of 1,000 TL, or vice versa in the case of a lower price than 70 TL), the local broker struggles to make these exporters collide. As such, the local broker aims to sell at the price of 71 TL by making a deal with the buyer at the price of 70 TL.

In another case, the local broker might be said a price of 7 TL, then starts at the price of 7.2 TL. The buyer side says, “I can buy at 7.1 TL for 40mt,” and the local broker sells it. Then, the local broker asks the seller the price of 6.9 TL for 20 or 40mt. Meanwhile, another person asks for 6.95 TL and the local broker accepts and closes the deal. Another one also comes yet the seller does not accept the price of 6.95 TL and the local broker continues at 7 TL. Meanwhile, a buyer comes and asks the price of 6.85 TL for 20mt; then the local broker puts it aside. Afterwards, someone comes and asks the price of 7.05 TL for 40mt and the local broker sells it. On the buying side, then, the local broker asks for the price of 6.80 TL for 20mt, if not, at 6.85 TL.

Therefore, the local brokers and thus their positions are significant. A local broker, for instance, can sell at 7.10 TL. There are buyers at 7 TL yet the local broker does not sell and continues at 7.1 TL. There are already buyers for the price of 7 TL, if not, someone might propose a selling price of 7.5 TL. Since there are other brokers than the local one, the buyer might say, “there are prices at 7 TL, your price is expensive” or “there are sellers at the price of 7 TL and if you give at 6.95 TL, I’ll

¹⁰³ In the daily communication, the wagon price of 70,000 is said as 70.

buy.” Then, the local broker looks at the current presence and price trends in the marketplace and sees that the prices are in a decreasing trend and sells at 6.95 TL or below. Or, if prices are in an increasing trend, the local broker might be in a position to sell higher prices. Therefore, the brokers have an impact on the hazelnut prices and the amount of hazelnuts exchanged.

The global brokers are also competent at acquiring special and local knowledge. Just after the government declaration of the Hazelnut Strategy, I conducted a phone interview with a global broker. When I asked “How is the market today?” he replied as follows:¹⁰⁴

Quiet. Some sellers and brokers in Turkey are talking about lower prices. We don't have any information that sellers and giving this kind of lower prices. We will wait until August. The price is also correlated with the attitudes of the growers in understanding valid prices. There will be no TGB or Fiskobirlik so we don't consider any of these institutions. But we consider how the state will apply the regulation.

The brokers do not enter into speculative activities; instead, they are trusted person due to their neutral position between buyers and sellers. Brokers who only work for the hazelnut market and who act objectively are preferred. Brokers who participate in political and party activities are not preferred by the price setters. Nevertheless, these types of brokers are also called by the price setters to acquire any information on the current market conditions. Therefore, the brokers are the points of reference for the buyers and sellers. If, for instance, there is no buyer left from the day before, a broker can give a price. However, if the market is in downtrend and the price rises higher than the market level and if the trading volume is low, a broker may take the

¹⁰⁴ Based on the notes of in-depth phone interviews with the broker.

risk to mislead buyers or sellers. Accordingly, it is vital for brokers to consistently follow the market dynamics.

Three Case Analyses

Three case analyses aim to understand the dynamics of the price formation process that have been explained so far. These case analyses will develop an understanding of the interaction between the prices executed at the local and global levels and how each price derives from another. The first case analyzes the process of the support purchase price formation of Fiskobirlik in 2005. The second case analyzes the formation of spot and forward prices in the crop season of 2009 in relation to pricing tiers and how power relations and institutional uncertainties affected the price decisions. The third case provides insight into the relation between the big players, how the market is constituted by these relations and how the interaction between the global and local market actors shapes the local market, and how this interaction implies uncertainties.

The Case of Fiskobirlik Pricing in 2005

The case of Fiskobirlik pricing in 2005 will be analyzed in this section in terms of the impacts of pricing on the institutional structure of the market and on the market dynamics. The case analysis also depicts how historic prices and the taken for granted perception of the local market actors affect the formation of support prices. The case analysis is also significant to depict how the lack of efficient calculations

has resulted in market crisis, price instability and uncertainty on the ground.

The support purchase prices have a direct impact within the price tier. When Fiskobirlik announces support purchase prices that are higher than the spot prices, the producers tend to give their hazelnuts to Fiskobirlik. Particularly in a season when there is a low amount of crop, Fiskobirlik begins to acquire the hazelnut supply prior to the exporters. This leads to increases in the spot prices for the exporters to be able to acquire the hazelnut supply by increasing the buying prices.

After restructuring, Fiskobirlik, since 2003, as becoming an independent institution, was in a position to declare the hazelnut purchase price during the crop season. The pricing decision was related to the estimation of the production level. The relations between the pricing and production level were derived from the motivation of the price setters to match supply and demand. As Fiskobirlik became financially independent, the institution needed to consider cost factors and the cost and benefit analysis. In the case of any financial difficulty, Law No. 4572 did not allow state intervention.

Nevertheless, even though Fiskobirlik became financially autonomous (from the state) after 2000, the institution continued to make decisions in the same vein they applied in the previous years (when the institution acted on behalf of the state). Fiskobirlik continued to aim providing higher prices with the idea to protect the producers. In 2003, although the government had briefed to Fiskobirlik to declare the price at 2 TL, Fiskobirlik announced it as 2.5 TL, in reaction to the government's unconcern with Fiskobirlik's financial difficulties. In the meantime, the exporters stepped in to acquire a decrease in the prices to 2 TL. At last, Fiskobirlik convinced the Prime Minister about the possible prices increases due to the low supply. Then,

as confirmed, the price increased to 4.5-5 TL in the following weeks.¹⁰⁵ The government's attempt to set the price at 2 TL is another case that illustrates to what extent the hazelnut market has been liberalized. Instead, the government is still involved in the pricing process.

This also may exemplify a more differentiating nature of the hazelnut market from other product groups. Although Fiskobirlik has become financially autonomous, its role has not been totally abolished from the market. It has continued providing support purchases as a regulatory institution, which has a crucial role in a market with excess supply of product. This regulatory role was also remarkable during the liberalization process.

Fiskobirlik's pricing policy, in the norm, includes the analysis of factors like estimated amount of crop, inflation rates, GDP deflator, price increases in competitive and alternative products (i.e., almond), producer's costs, export prices, profit/loss conditions of the producer cooperatives and the market sales prices of shelled hazelnuts, and hazelnut products are taken into consideration. In 2004, due to low supply as a result of the frost, since the spot prices increased to 5.2 TL, Fiskobirlik declared a price of 5.5 TL. In the end, the prices rose to 7.2 TL in the market due to the drastic fall in the crop level.¹⁰⁶ From 2001 to 2004, during its period of financial autonomy, Fiskobirlik's prices were seen as confident and accurate and its pricing policy increased the credibility of the institution.

However, these factors seem to have been manipulated, which resulted in inaccurate pricing. In 2005 and 2006, the picture changed when Fiskobirlik fell short in estimating production level that was closer to the realized numbers. The

¹⁰⁵ Based on the interviews with the Former Head of Fiskobirlik during these years.

¹⁰⁶ Since the crop level reached the lowest levels, the product of 2001 was stocked by Fiskobirlik.

bankruptcy of Fiskobirlik started during the 2005 pricing and estimations. According to the head of Fiskobirlik, in those times, the crop estimations conducted by all of the institutions independently confused them; hence, the estimations were totally different from one another. For instance, in 2005, the Chambers of Agriculture declared as 457,000, Fiskobirlik 501,000 and after the frost they decreased it to 483,000, and exporters as 520,000. However, the crop was realized as 577,351, which was considerably higher than the estimations. The incorrect estimations led to higher prices that resulted in dead weight for Fiskobirlik. The market faced a severe crisis that affected every sphere of the market.

In 2005, according to the head of the Governing Body of Fiskobirlik in these times, due to the high prices in the previous year, “all of the cooperatives and their leaders were conditioned for a higher price as a reference price of 7 TL in 2004.” The price of 7 TL was the last market price of the season, which was taken as the reference price for the following year’s support purchase price.

Similarly, most of the producers I interviewed mentioned that the purchase prices had never been lower than that of the previous year. Considering this kind of attitude and the imagination of Fiskobirlik in the producers’ mind, the head of Fiskobirlik in these times stressed that “the producers are acting as if I am the government ... they are saying that our hazelnuts are 7 TL.” Then, he added that “...during the meeting, I thought that the gross price would be around 6-7 TL, and the net price would be 5.5 TL; hence, the difference from the previous year’s price of 5 TL would be 0.45-0.50 TL.”¹⁰⁷ During the board meeting on pricing, when the

¹⁰⁷ Based on the in-depth interview with the head of the Governing Body of Fiskobirlik (employed in 2005), who was the primary contact of price negotiations in the decision-making body.

price was declared as 7 TL, the President of the Board explained the “rational” in pricing as follows:

There are 50 cooperatives and, above all of them, there is a high committee that is composed of their unions. The bureaucrats of these cooperatives sit down and start discussing what price we will form. They discuss this and that about the crop level, the supply-demand conditions, previous prices, negative conditions of producers. In that year, the west [*area of the Black Sea region*] part offered a price of 8 TL and the east part [*of the Black Sea Region*] offered 6 TL and we decided on the average, that is 7 TL.

Therefore, in 2005, the Governing Body of Fiskobirlik announced a higher price of 7 TL than the previous year’s support price, which might be characterized as a price that was the highest support purchase price ever. Based on the in-depth interview conducted with the head of Governing Body of Fiskobirlik who was on duty in 2005, the government had allowed Fiskobirlik to declare the purchase prices, but the head of Fiskobirlik in these times said that they had been misled by incorrect crop estimations. These high prices created a perception of victory and valor on the side of the producer groups.

The producer organizations reacted positively to the price declaration of Fiskobirlik, considering it heroic. They sent each other congratulatory messages, like the message below sent from one president of the Chamber of Agriculture to the president of one of Fiskobirlik cooperatives in the west Black Sea region: “Dear President ... I’d like to congratulate first you personally and your Board as well as your employees on your effort, endeavor and altruism on the determination of Fiskobirlik’s purchase price in 2005. Your signature on these declared prices will take place in the golden pages of history.”

During these times, the local market experienced its most sparkling times for

the producers, but also opened the market to speculation. The Chambers of Agriculture, despite their lack of control over prices, started speculating on the price and misinformation, saying that there was a possibility of an increase in prices up to 10 TL.¹⁰⁸ More importantly, hazelnuts had become an investment tool in a way that people had even begun to think about selling their (old) cars in order to purchase hazelnuts as an investment. Also, the producers started borrowing money for housing and renovations with the expectation that their products would be worth more than 7 TL in reference to the previous year prices.

However, the market crisis began when the market prices entered a decreasing trend due to the crop realized at higher than the estimations. Fiskobirlik generated losses due to hazelnuts purchased at 7 TL. Therefore, Fiskobirlik was in a position to pay the debts of producers who sold their hazelnut at 7 TL. Fiskobirlik's bankruptcy had just begun due to the limitation in their use of bank credits (Law No. 4876).¹⁰⁹

The market crisis resulted in the bankruptcies of producers, small merchants and Fiskobirlik. On September 12, 2006, the Governing Body of Fiskobirlik changed and was replaced by a new body. In 2006, Fiskobirlik benefited from bank credits in exchange for the TGB's account receipts in the amount of 182,792,444 TL. Also, Fiskobirlik let the creditor producers use a private bank credit by ensuring the stocked hazelnuts of the creditor producers on behalf of Fiskobirlik. These creditor

¹⁰⁸ The Chamber of Agriculture dropped hand-outs that said, "do not sell your hazelnuts, the price will be higher and higher" from a helicopter all over the region. However, since the prices dropped dramatically, the producers who did not sell their products at high prices lost a lot of money.

¹⁰⁹ In 2005, the collapse of Fiskobirlik was related to the exporter's competitive attempt to prevent the export of Fiskobirlik. In 2005, Fiskobirlik exported around 2,000mt of hazelnuts to France at the price of \$940-941. The idea of Fiskobirlik was to keep the market dynamic by both buying and selling hazelnuts. However, the exporters challenged Fiskobirlik and accused the institution of distorting the market. Moreover, the exporters offered a lower price of around \$850 to the client of Fiskobirlik in France. The head of Fiskobirlik at this time claimed that the collapse of the institution was that it had been prevented from exporting.

sharers from the debt that remained in 2005 were used credits from the Şekerbank Black Sea Regional Administration as bail credit in the amount of 52,000,000 TL.

In December 2007, during the period of the upcoming presidential election, the Board was determined to elect a president who was a member of the party in government with the idea to benefit from possible government resources in order to release the debts to producers, credit unions and employees.¹¹⁰ In fact, the expectations were futile despite the constant efforts of the board with the slogan, “Fiskobirlik will survive as long as hazelnuts exist” and due to so-called “failing promises made by the state representatives.” Even the debt position of Fiskobirlik had become worse and the creditor producers remained the debtors of Şekerbank. Finally, in the summer of 2009, they were informed by letter that liens had been put on their property. Based on the face-to-face interviews, Fiskobirlik, as the sole producer organization with which the producers had been in constant interaction, came to be perceived as an institution of distrust and disappointment.

From 2006 to 2009, Fiskobirlik experienced truly hard times. Changes within the institution, its employees, their attitudes and body language reflected the change and at each visit to the institution, I observed disappointment, distress and sometimes anger. The tension picked up when the institution representatives were been in a position to account to the creditors and the producers who had received the bank letter to claim the credit debt. I also witnessed angry managers who had to persuade the angry creditors and producers about Fiskobirlik’s credibility and reliability.

¹¹⁰ The report of the Fiskobirlik Working Group on the President of these times reflects how severe and harsh the hostility against the Fiskobirlik managers was, even within Fiskobirlik. Just before the election to be held on December 1, 2007, they distributed a press release to the board delegates with numerous accusations against the presidency and his current board. Starting with the title of “The Real Face of the President and his Managers,” the release was full of accusations and denunciations. Listing the past duties and activities of each individual, the release examined the president and each manager in terms of his or her duties in active politics, the impact of political parties on their individual success and, more importantly, the infraction of rules and nepotism.

Accordingly, this also has led to the collapse of debt networks as a sign of the shift from a borrowing to a credit mechanism. As such, producers started to become the “loyal” but debtor customers of private banks. The debtor producers had to defer the payment of the principal capital to the following year and by only defraying the amount of interest. As a result of these changes, the local network constituted to assure low risk by guaranteeing the sales of the creditor throughout the debt chain collapsed. The market was reconstructed on the risk perception. In fact, the producers remained in dispossession and in deep uncertainty due to the removal of their institutional ground for policy making and support pricing.

The Case of 2009 Price Formation

The case analysis provides an insight into the price process in 2009. The case offers the opportunity to examine the price changes in relation to estimations, amount of crop, power relations as well as the role of the producer’s reluctance. On July 15, 2009, the government announced the Hazelnut Strategy on free market principles had been initiated in the hazelnut market. According to the law, prices would be formed on the basis of market dynamics and free market principles. After the government declaration on the new regulation, forward prices started decreasing from \$580-600 per kg to around \$450 per kg. The decrease in forward prices confirmed the expectation of the exporters that the spot prices would be low in the crop season. The motivation of the exporters during these changes in prices was affected by their idea that “since the government involvement is removed, we [*exporters*] can keep the prices low.”

However, the dynamics of these price decreases entailed a variety of factors. These included the excess supply of hazelnut stock available in TGB stores (on behalf of the state), the state's behavior, the selling position of the producers, the position of the price setters and speculations.

The exporters lost revenue on forward contracts in the year of 2009 for three basic reasons: the increasing spot prices, the low crop level, and the reluctance of the producers to take their product to the market. The increase in spot prices was related to the reluctance of producers. The attitude of the producers is that the amount of product they put into the market is also related to market uncertainties and important for the market positions of exporters. Throughout the case study, these dynamics will be analyzed.

Changing Prices and Estimations

On July 15, when the government announced its new law, it was almost one month before the crop season opening. The hazelnut crop season starts when the new crop first enters into the market from the beginning of August. However, until that time, the exporters had already executed forward prices. When the law initiated the free market principles, the expectations and estimations of the exporters changed.

During the execution of forward prices, the exporters estimated that the TGB (on behalf of the state) would conduct support purchases at support purchase prices. One exporter said that, "Although the state had given the price of 4.5 TL the previous year, the market became 2 TL. Now, the crop seems low but at the beginning of the season the prices started at high levels. Hence, I might make my offer at this price

(around 2 TL)”.¹¹¹ Therefore, some exporters made estimations on the basis of their past experiences and historic prices. As such, their implication of pricing represents their root and pathway of estimating the spot prices.

Following the initiation of the free-market principles and the removal of the state involvement in 2009, however, some of the exporters assumed that they could manipulate and decrease the prices. This was the time before the start of 2009 crop season. This assumption was based on the motive of the exporters to attempt to decrease the spot prices by keeping the spot prices below the forward prices.

With this attempt, some of the exporters contacted with the importers and informed them that the prices would go down due to the lack of state involvement. Therefore, as long as the importers hesitated to buy at such prices, the prices declined to \$400-\$410. One broker explained the market conditions in these days of transition as follows:¹¹²

Difficult ... after 16th July. The market did not know what to do. The exporters said market would down because there would be no force. That is to the buyer's advantage. Prices would fall. People tried to change the new regulation. It is more difficult now. Since the new regulation, there is no market. Why? The buyers do not know what to pay. The sellers so know and take risks.

Some exporters made the same method for calculation as if they spoke from the same mouth. Also, they frequently contacted each other. Most of the exporters described the same calculation as if they had applied it at the same time. This might also be because the exporters had been involved into the creation of the Hazelnut Strategy, initiated by law in July 2009, whereby the amount of area-based support was

¹¹¹ Based on the notes of in-depth interviews.

¹¹² Based on the notes of in-depth interviews.

determined. During the design of the Strategy, the calculation of this support was conducted by the exporters as follows: The spot price was to be around 2.5 TL. With the addition of the support per kilo would be around 1.5 TL. The total of 4.0 TL would be a good price for the producers. This estimation was expressed by most of the exporters when I interviewed them. The calculation of the exporters on the spot prices for the crop of 2009 followed the same path. This was explained as follows:¹¹³

Exporter: This year, the crop level is low, thus the price may decrease most dramatically to 2 TL and the average becomes 2.5 TL or 3 TL. Let me explain as follows [*Drawing the following table to demonstrate*]:

	Estimation 1	Estimation 2	Estimation 3
Amount of support per kg	1.5 TL	1.5 TL	1.5 TL
Spot price	2.0 TL	2.5 TL	3.0 TL
Final price	3.5 TL	4.0 TL	4.5 TL

Above, [*the price of*] 4.5 TL is a perfect price that also was not reached last year. This year the yield is very good, the price will reach 4.75 TL, which will make the net price 4.00 TL, which is still a perfect price. The worse situation is the price of 3.5 TL, yet the total cost of hazelnut production cannot be more than this.

In my opinion, the prices will come into being at 3 TL, and following August 21, the product will begin flowing to the market slowly. Then prices will decline a bit to around 2.5 TL; they may drop a little more down to this level, but it will be temporary. After that, they will rise to 3 TL and further, maybe to 4 TL.

Similarly, one exporter always gave low prices for the new crop with the expectation that the supply of the new crop would be higher than the old crop available in the market. In light of this expectation, he estimated the spot prices as follows:¹¹⁴

I thought that in the first weeks of September the prices would suddenly decrease to around 2.00 TL and even to 2.20 TL and until the first month, prices moved to around 2.50-2.60 TL, which means there is a need to deliver

¹¹³ Based on the notes of in-depth interviews.

¹¹⁴ Based on the notes of in-depth interviews.

product to Europe and they [*Europeans*] will buy product at the price of 3.00 TL. Hence, prices do not decrease and thus maybe increase to 4.00 TL. Further, since producers are in debt due to production costs, especially after the crop season, then prices will decrease.

The exporters also analyze the sector reports and weekly data in terms of the export volumes, stock levels and forward and spot price. Some exporters were very confident about their price estimates. One exporter assumed,¹¹⁵ “Prices will further decrease, in August. They will increase, after August 7, after which they will continue at normal levels.” Similarly, on the estimations and personal assumption at these times, one exporter said that:¹¹⁶

We’re ready for the new season. The markets are the same, somehow quiet, I mean, there is tranquility, as if everybody has his mouth sealed. Everybody is waiting for what will happen. There are some thoughts in relation to the TGB [*any expectation of TGB sales*] ... The prices will not start under 3 TL ... Maybe the price of 3 TL might be perceived as too low... but it might become lower in time... Here, if the price becomes 3 TL or lower, yet we intervene, ... Since the crop is low, we may in position to sell each product ... We put a precautionary support, even the producer sells the product at 3 TL. In addition to what we will give, the price will be similar to last year’s prices. Therefore, producers will not be in a disadvantageous position. That is the general view. However, the producers who produce in areas that do not have certificates do not have such a right [*to receive support payments*]. They are on their own.

In fact, not all of the exporters had this kind of motivation. Some of them were cautious about the changes rather than considering the removal of the state as an advantage for the manipulation of prices. Therefore, they were in a position not to decrease the price without seeing the crop opening, the attitude of the producers and the starting spot prices. One exporter said, “

¹¹⁵ Based on the notes of in-depth interviews.

¹¹⁶ Based on the notes of in-depth interviews.

I won't sell at \$400. Now, if the market opens at the price of \$350, that's different. If the producers do not bring their products to the market, will I take the product from their store by force? Then, the prices will go up due to low supply and for each \$500 per kg; I will lose. An honest man can't overcome this situation. It is not necessarily to say that everyone who makes forward will make profit, instead, lots of them may come to grief.¹¹⁷

Some of the exporters expected possible sales by the TGB that might lead to price decreases. The stock available in TGB's stores is equivalent to the country's one-year needs (including its export and domestic consumption). According to the law, although the hazelnut stock will not be put into the market until January 2010, during the whole season in 2009, every market actor was suspicious about the determinateness and implementation of the state not to put any hazelnut from the TGB into the market. Market actors never trust the TGB declarations. Every agent including producers, producer organizations, intermediaries, exporters and importers had an eye on the TGB. This distrust was based on the past experiences of the market actors. One exporter shared his experiences as follows:

This was 4 May in 2007 when the TGB issued a press release saying that 'Due to the insufficiency of crop, I will not sell the product in my stocks. I will sell after the end of current available stocks in the market.' After three weeks, however, the institutions opened a bid. Then, since I didn't take a bid position, I lost \$400,000 due to such unexpectedness.

Throughout the crop seasons in 2009, the exporters kept expecting some sales from TGB when the market has been in a short of supply. They speculated that the TGB might put hazelnuts into the market, also that there was a high probability for this, if Turkey was going to sign the IMF agreement. Contrary to the expectations, the TGB did not sell any of its stock to the market as had been prescribed by the declaration.

¹¹⁷ Based on the notes of in-depth interviews.

Low Amount of Crop and the Attitude of the Producers

The amount of product coming to the marketplace or the crop in a given crop season has a direct impact on the market. Exporters perceive the risk of confronting a lack of enough products just before the delivery time of forward contracts. This risk has two directions: one is the difficulty of finding product and second is the failure to deliver the agreed amount of product at the agreed time.

In the previous years, to overcome a low crop, the exporters had purchased hazelnuts from other hazelnut markets such as Georgia or Azerbaijan in a close crop season, for instance, with the pursuit of a sales policy based on current supply. Following the 2004 frost, for instance, the exporters had found the purchase prices of Fiskobirlik exorbitant; despite this, they had to buy product at high prices from Fiskobirlik in order to accomplish on-time loading.

During the 2009 crop season, however, the amount of crop was low and also the producers were reluctant to bring hazelnuts to the market. Therefore, the exporters had trouble finding the required amount of product to be delivered on time on the basis of their contracts. The three-month period from September to December (the delivery time of forward) is very stressful. Some exporters expected that the producers were in need of cash due to the starting time of schools and Ramadan in September. These expectations were based on the product coming to the marketplace and thus price decreases (i.e., from 4.2 TL to 4.1 TL). Moreover, they expected that if the TGB did not sell any amount of product, the price was expected, for instance, to increase to around 4.5-5.0 TL.

Such unexpected conditions made these dynamics apparent in 2009 in a way

that even brokers who had confronted unpredicted prices because there was a prediction in the market that presented power relations on price formation. When, for instance, I informed a broker about the opening prices in the west Black Sea region as 3.2 TL, his eyes widened and he said, “I estimated the prices as 3 TL, but there might a difference by 0.2 TL ... [*thinking*] Well ... Very bad ... They [*exporters*] may be disappointed.”

For instance, a pre-seller might expect that producers might sell their product at 3 TL; however, if during the new season, the producers resisted selling their products and waited, prices might suddenly rise to 4 TL, and then these pre-sellers might go bust. In fact, one reason for the increase in prices is the forward contracts whereby exporters have to commit the promises of the contract by delivering the product at the right time.

It was the end of September 2010 when they had to obtain the necessary amount of hazelnuts. At that time, the last forward contract had been executed; for instance, specifying the delivery time in February. One exporter told me that “To give an appointment to you even proves the emptiness in the market.” Therefore, a sense of bareness, frustration, conflict, and emptiness may characterize the conditions of uncertainty on the side of the exporters. Another exporter said that: “Brokers aren’t calling us; this means there is no buyer”.

When the exporters were asked whether they had expected such low levels of crop, they said, “really, we were not expecting it, but the producers quite resist as well.” Nevertheless, with the idea of not increasing prices, the importers did not buy position in the following weeks.

The Role of the Hazelnut Kings: The Case of Başkan Gıda and Oltan Gıda

Forward pricing is a risky tool of exchange executed by the exporters. The largest exporters in the market are called the “hazelnut kings” [*findık kralı*]. These so-called kings are the key export leaders for the local market and control a wide supply network. The bankruptcy of a king might result in the collapse of the whole network. In the past, the hazelnut kings were associated in relation to price speculation, instability and bankruptcies. In light of the this introduction, this case analyzes two hazelnut kings, Başkan Gıda and Oltan Gıda, in relation to their impact on the constitution of the hazelnut market. Offering comparative insight, the case provides an understanding of the reasons for the bankruptcy of the hazelnut kings, the implications of this collapse, how the market crises have changed the role of the hazelnut kings, and how the big global player shapes the market conditions.

How Does One Become a Hazelnut King?

The hazelnut kings possess a considerable amount of capital in order to create the networks of local suppliers with the aim to ensure a certain amount of hazelnuts to be submitted on the necessary terms. Therefore, the hazelnut kings control the largest network in the local market, which is constituted by merchants, grocers and factory owners, their producers, and might even include other exporters, as well. More importantly, the hazelnut kings control this large network with the aim of serving to the largest importer. If a king is able to guarantee his network and the amount of product agreed on forward agreements, and if he compensates the forward prices

with spot and purchase prices, his position remains stable. However, there are always risks when dealing with this large volume of business.

The hazelnut kings are involved principally in a strategic partnership with one of the main importers, Ferrero, as the largest hazelnut importer. Although the company does not tend to endow all of its import capacity to one exporter, Ferrero has always had a strategic partnership with a few of the exporters in the local hazelnut market.

Başkan Gıda started providing hazelnuts to Ferrero from the mid-1980s to 2002. Towards the end of the 1990s, Başkan Gıda became the largest hazelnut supplier to Ferrero. Başkan Gıda was an old established hazelnut exporter company. According to a descriptive document release by the independent financial consultant of the company, the company had annual sales worth approximately US\$200 million, and spent US\$130 to 140 million purchasing hazelnuts in Turkey for cash for processing and forward sale. Sixty-five to 70 percent of its sales had been conducted with Ferrero, which is the largest hazelnut importer in the world. Ferrero bought on average 30,000mt of hazelnuts per annum from Başkan Gıda, on a cost plus basis paying Başkan Gıda a fixed US\$120 premium over cost (EWHC, 2009).

The Collapse of Başkan Gıda

In the local market, every market actor gave the example of Başkan Gıda as a case of the collapse of a hazelnut king. The local market actors said that the reason for this collapse was the personal passion and ambition of the owner to block the market through “hostile” forward contracts. In 2001, the financial crisis that the country

experienced dramatically affected every sphere of the national economy and resulted in currency devaluation and the skyrocketing of currency exchange rates. Similarly, in the hazelnut market, the currency devaluation resulted in the bankruptcy of the hazelnut king, Başkan Gıda.

Before the time of crises, Başkan Gıda had built a considerable amount of investment, which was based on credits from Turkish banks in USD. During the crises, however, the banks credits were restricted and the company fell into difficulty to find the credit to finance these investments. Throughout the crises, the bank interest rates dramatically increased. While the company said that they would pay the credit payments with the hazelnut export revenues, which was just after the hazelnut crop season, the banks in Turkey were in a position to call the credits from the debtors. In November 2001 and February 2002, the Turkish Lira was greatly weakened against the USD. As a result of the devaluation, the Turkish Lira lost its value by 50 percent. Therefore, Başkan Gıda was in a position of not being able to pay its debts to the banks. The company then filed for bankruptcy.

The factors of this collapse were the unfeasible investments decisions of the company, the large amount of bank credits in USD, and the heavy reliance on the strategic partnership of Ferrero in forward agreements and the currency devaluation and skyrocketing interest rates. Besides, another key factor was Ferrero's decision, taken in November 2000, to cease making pre-payments to Başkan Gıda. The time of this decision corresponded with the crisis in November 2000 in Turkey. Therefore, the reason for the withdrawal of the pre-payment system was based on the credit risk inherent in making pre-payments to Başkan Gıda in a country that was vulnerable to crises.

In March 2001, Başkan Gıda attempted to obtain long-term financing from Ferrero. With a letter sent by Başkan Gıda to Ferrero on March 26, 2001, Başkan Gıda sought US\$30 million of finance from Ferrero. The letter also offered that Başkan Gıda would be Ferrero's exclusive supplier with a reduced profit share with the aim to repay the finance in ten years. The letter also suggested that Başkan Gıda could applied for a credit to a bank to be chosen by Ferrero with Ferrero's promise to buy 30,000 to 40,000mt of hazelnuts per annum from Başkan Gıda, constituting that bank's main security for repayment (EWHC, 2009). As this attempt of Başkan Gıda to secure its single sole supplier conflicted with the Ferrero's policy to avoid the dependence on a single local supplier, Ferrero rejected the offer. Nevertheless, Ferrero tried to assist Başkan Gıda in obtaining finance outside Turkey at lower rates of interest. However, these attempts have not resulted positively. As a result, Başkan Gıda tried to search for finance credit from other sources (EWHC, 2009).

The motive of Başkan Gıda to find another finance source was the current debt position. The company had built a new factory and they need to cover the bank credits that they received for this investment. Moreover, another motive of the company was the risk taking to be able to continue being the hazelnut king. However, in November 2000, Ferrero informed Başkan Gıda that the prepayments would no longer be made; Başkan Gıda continued to make forward contracts for the 2001 crop. Considering the crisis conditions in the country, Başkan Gıda had become very vulnerable to collapse.

On December 14, 2001, Başkan Gıda acquired credit financing from the Bank of Tokyo-Mitsubishi UFJ Ltd and KBC Bank N.V. at an amount of US\$35 million. Başkan Gıda proposed that, with the credit financing, the company aimed to finance

the purchase and processing of hazelnuts. During the negotiations with the bank, the motive of Başkan Gıda was to repay the credit financing in the exchange of the sale of hazelnuts to Ferrero. The banks provided the credit financing on the basis of this plan. Therefore, the banks considered Ferrero's purchase in the 2002 crop season as the finance of the repayment.

However, by the end of February 2002, Başkan Gıda had drawn down €22,821,566 pursuant to the bank credit, and repaid through Ferrero only €1,402,022.68. Başkan Gıda re-numbered the previous contracts executed with Ferrero to present to the banks as new contracts to obtain the credit financing. During January and February 2002, unknown to the Banks at the time, Başkan Gıda transferred substantially the whole of its operations, assets, hazelnut stocks and employees to Aksu Gıda. Başkan Gıda ceased trading at the end of February and defaulted on its repayment obligations to the banks. In May 2002 there was a further purported transfer of the hazelnut business and assets to Başkan Yüksel.

A court case was opened by the Bank of Tokyo-Mitsubishi UFJ Ltd and KBC Bank N.V. The trial ran for six months with over 56 days of oral evidence, 30 days of submissions, and 35 days for judicial reading and preparation of the judgment. It was estimated that Ferrero's costs alone may have been in excess of €11m (Digest, 2009).¹¹⁸

The banks accused Başkan Gıda and Aksu Gıda of fraud; and Ferrero of being liable, having knowingly participated in this fraud. One argument that the bank alleged and Ferrero denied was that during the negotiation of Başkan Gıda on credit

¹¹⁸ The court decided that "companies are not obliged to preserve the relevant documents as soon as litigation is contemplated. If there were to be inferences drawn of a cover-up of Ferrero's involvement, the banks had to prove (which they could not) that Ferrero had deliberately withheld and destroyed documents as opposed to routine destruction, delay or incompetence" (Walker Morris, 2009).

financing with the banks, the bank representative had explained to one Ferrero employee who had attended the meetings that the banks would be likely to rely on Ferrero's conduct in the acceptance of the credit financing. The Ferrero employee had claimed to the court that his participation to the meeting had not scheduled before and he had been asked to meet the bank representatives just five minutes before the meeting. Moreover, on the request of Başkan Gıda, the Ferrero employee had been convinced to send two reference letters to the relationship manager of the banks on July 31 and December 17 in 2001 (EWHC, 2009).

However, the banks needed to have proof that Ferrero had been aware of this fraud and were liable as an intermediary to fraud. The banks also alleged that Ferrero had destroyed key documents. The trial came to an end in June 11, 2009, by concluding that the banks had failed in their claims to Ferrero. The court also found that the owner of Indo Mediterranean Commodities, an English company with the majority shareholding of Aksu Gıda, was "a dishonest man" who designed "to give a false and misleading impression" (EWHC, 2009).

The court case provided an analysis on the close relationship between the global buyer and local exporter. Although the relationship was not based on the legal business associate, the strategic partnership depicted the informal character of the market and price making. However, the informal bargaining, negotiations and partnership between the local and global had the limits when the local supplier had experienced difficulties – also in relation to the financial crisis in the local country – and when the global buyer cut off the pre-financing payments.¹¹⁹ Nevertheless, the

¹¹⁹ This is the network that consists of crackers, intermediaries, grocers, merchants. This network is conceptualized as being made up of informal institutions and was discussed in the previous chapter.

reconfiguration of global-local relations created new ways of partnership with different methods and learning.

From Başkan Gıda to Oltan Gıda

In the local market, after the fall of Başkan Gıda, and especially following the end of the prepayments made by Ferrero, the expression “hazelnut king” changed. However, Ferrero continued with its strategic partnership without the prepayment mechanism. The market leader, Oltan Gıda, became the largest hazelnut exporter after Başkan Gıda. Among the reasons for the shift includes that Oltan Gıda was the main competitor of Başkan Gıda. Since Ferrero did not work with a single supplier, Oltan Gıda was one of the main suppliers of Ferrero.

Considering the prices, Oltan Gıda quoted the prices with a similar base product price, processing costs and mark-up rates to the prices quoted by Başkan Gıda. Also, Oltan Gıda maintained the quality standards of Ferrero and keep on-time deliveries. For instance, when the Turkish Lira was devaluated in 2000 and 2001, the mark-up rates, based on the USD, decreased, Oltan Gıda continued on-time deliveries (EWHC, 2009).

Providing a comparative insight, the changes in the market from 2001 to 2009 derived from several factors. First, the changing role of Fiskobirlik resulted in the weakening of one powerful actor in the market, which represented a source of speculation and struggle among the local market actors.

Second, the 2004 frost resulted in the dramatic fall of the intermediaries and thus network relations. In the times before the frost, the market actors had tried

taking position against speculative actions by paying attention to gossip or rumors and created their expectations accordingly. When the market actors shared their past experiences, they revealed that prices had tripled in a very short period of time. In these times, speculation was related to price estimations and predictions of the behaviors of agents. Since the 2004 frost, although the behavior of buyers both in the domestic and international market have remained determinant in price formation, following the collapse of the market as a result of the speculative actions, the speculative behavior has not been the sole determinant of price.

Third, in addition, the changing bank regulations after the 2000 and 2001 crises brought stability to the interest and currency rates. If an exporter could guarantee his stock, there was no risk in price changes, yet he had to take a risk in the forward sales of the product of a new crop season. Following the crisis, the exchange rate regime became more stable in Turkey, which was reflected as exchange rate stability in the hazelnut market. The fluctuation of the exchange rate before and during the crises have created huge profit and cost margins.

The market actors trusted the guaranteed leadership of Oltan Gıda without entering into speculative purchases that might damage the market conditions. The market leader preferred to trade in on a guaranteed basis without taking risks in terms of inventory investment and bank credits. Nevertheless, this does not necessarily mean that Oltan Gıda did not position itself in long or short sales. Instead, as the largest exporters' speculative positions decreased, the market dynamics, network supplier, producer and price were affected less by an adverse position. The case of Oltan Gıda proves that the price setters who did not take big risk with forward contracts could sustain in the market and overcome challenges and unexpected

circumstances through guaranteeing daily transactions and forward contracting. Moreover, as the exporters, factory owners, crackers and intermediaries had trust in the market leader who had the power to manipulate the prices, they did not take risk positions. Such a market that embraces less speculation provides peace among the informal network.

Conclusion

This chapter analyzed the hazelnut price and market construction that included big sellers and buyers, the price formation processes, strategic partnerships between the local and global market actors, trade relations, and the factors that shifted the power dynamics in the market. As such, the market is the combination of all means of global and local actors who struggle against uncertainties while at the same time constitute and shape these uncertainties. The power is the ability to control and intervene in these uncertainties.

In the global level, uncertainties and risk are overcome through strategic partnerships with the local suppliers. At the local level, local networks and informal institutions are created as an attempt to defeat uncertainties. Considering the network relations and informal institutions, Appadurai (1986) mentioned that rumor mixed with more reliable information regarding product stocks, government regulations, seasonal shifts, producer's attitude, and intra-market developments including the rumored intention or motives of speculators. All of these constitute scenario of variables that affect pricing as well as its formation and distribution.

The market leader aims to control the price through its networks at the local

market. At the both global and local level, the market actors who are involved in the price and export processes are powerful and thus they are able to control, manipulate and intervene in uncertainties. The previous chapter provided an analysis of the interaction between formal and informal institutions. Relationally, this chapter elaborated this interaction as the tools of the exporters to manage uncertainties. The largest hazelnut exporter controls a large network of informal institutions, which include grocers, merchants, crackers and factory owners through informal means.

The pricing process embraces the complicated, unexpected and risky behaviors of pre-sellers as well as the endeavor of market actors to understand these processes through market research, negotiations and speculations as well as to position themselves through market penetration and strategic partnerships. The market price tiers were identified as forward, spot and purchase prices to better explain the market making process and how this process, from the local to global level, includes power relations. Each price tier is related to the others, and during each interaction between these tiers, a new sphere of power configuration is envisaged.

If the exporter stays in an open position without storing the necessary amount at a guaranteed price, the risk becomes binding for all parties including not only the sellers but also the buyers, bankers and intermediaries. The risk is related to the inconsistency between forward and spot prices during the crop season. It may only be compatible to make profit by offering higher forward prices than spot prices. However, the competition among exporters leads them to offer forward prices as low as possible to attract importers.

Therefore, the exporters in the local market have the power to form the market prices and to intervene into uncertainties. It is this power to provide the exporters

two-sided profit margin, by which the profit both comes from the global and local transaction. The speculations through short positions of some exporters, which have led to dramatic price decreases, result in pejorative connotations negative opinions about the exporters on the part of producers and producer organizations. This negative tone is also related to the power position of the exporters. In fact, this power is not an unbeatable one. Therefore, the power of the producers is created when the producers have a reluctant position, which presents their position to intervene into the stock and supply of hazelnuts.

The struggle and competition between the market actors shapes the market in a way that each market actor acts as if he live in a Hobbesian world in which every agent struggles to maintain his position. Yet, the aim to enlarge the market share becomes risky due to again tough competition that is amplified in the local market as the big players have the power to control the price processes and everyday contingencies.

As a result of uncertainties (i.e., speculation, prices, stock levels and state policies) and unknown risks (i.e., the level of crop), the global actors attempted to change their strategies. Recently, the motive of the global market actors has been to be directly involved in the local hazelnut market in Turkey. The global group companies, the Ferrero Group, the Olam Group and the THR Company, established hazelnut storage facilities in Turkey, and in other countries in the case of Ferrero. This chapter depicted the background and push factors of this motive and how the local market structure gave way to the initiation of such global strategies. It was the local dynamics that shaped and finalized prices and created risks and uncertainties. Therefore, it was not solely the global actors that made the markets. In fact, the price

struggles at the local level and the global-local interaction largely contributed to the market making.

All of these arguments were depicted in three case studies. First, Fiskobirlik's price policy in 2005 on the basis of historic prices resulted in the highest purchase prices ever in the local market. The hazelnut purchase at high prices led to the bankruptcy of the institution. The collapse of Fiskobirlik also resulted in the elimination of the regulatory agent in the market. The motive to set high prices is not only to set the historic prices, but also to maintain the market power in relation to the identity and interest of Fiskobirlik. The role of Fiskobirlik will be examined in detail in the next chapter.

Second, the case of the 2009 crop and price formation similarly showed how the market actors have actions that are based on estimations and expectations of the amount of crop, the state actions and the spot prices. Some exporters, who have made inaccurate estimations, have born losses. Also, the attitude of the producers had an impact on the prices that increased to around 4 TL, contrary to the estimations around 2.5 TL. Uncertainty derived from these estimations and expectations that form the prices.

Third, the case of the hazelnut kings, Başkan Gıda and Oltan Gıda, provided insight into the trading relations of Ferrero with its strategic partners. The change in the supply policy of the global actor led to the collapse of Başkan Gıda and the arrival of Oltan Gıda. The removal of the prepayment system eliminated the risky forward contracts that had mostly been replaced by bank forwards. The shift represented a parallel movement with the changing banking system in Turkey after the severe crises. Despite the severe economic crises in the country, speculations and

personal risk have had an impact on the local networks and informal institutions whose roles are to maintain the local market dynamics.

The chapter revealed that the market is not a place in which prices are executed by *invisible* hand. The visible hands of the market intersect with each other in different spheres with different expectations. Therefore, there are no free buyers and sellers. They are interdependent on each other.

Moreover, the anthropology of price making uncovers different aspects of pricing in which different configurations of power relations and interactions between the market agents are created with diverse expectations and motivations. These are the prices constituted by the perceptions and expectations of the price setters. Such a multiplicity in pricing depicts how market agents intersect in multiple ways (Çalışkan, 2007c). Furthermore, the negative outcomes of the reliance on the historic prices in the market making revealed how the markets do not exist as permanent constructs and as single entity. Instead, in each interaction and encounter, a new form is configured.

While this chapter provided a descriptive framework of how prices are formed in the market, it was the aim to provide a critical analysis on how power relations and strategic contact between the local and global shapes the local market. The nature of the local market as complex, opaque, complicated and uncertain market processes was explored examining the changes and ever-shifting power dynamics. I concluded that the markets are constructed and maintained by uncertainties; and uncertainties, which ensure the market maintenance, are created through power struggles and the individual self-interests of the market actors.

CHAPTER 6

STRUGGLES BETWEEN FORMAL INSTITUTIONS

This chapter analyzes how the contentious controversies are created in the local market and how the formal institutions contribute to the market making processes by creating rhetorical devices. The concept of controversy is identified as follows (Callon et al. 2009): “Controversy focuses on plausible but fictional scenarios that provide acceptable interpretations of the observed facts ... Controversy carries out an inventory of the situation that aims less at establishing the truth of the facts than at making the situation intelligible” (p. 22, 28).

The rhetorical devices are analyzed within the creation of social-technical controversies. Economists, linguists and economic sociologists have studied the concept of rhetorical devices and strategies. This chapter analyzes the concept in relation to the attempt to structure a reality in the process of socio-technical networks (Lilley et al., 2004) as the formalistic language with metaphors to persuade the audience (McCloskey, 1985; Swedberg, 2003; Mirowski, 1994) and change (Chakraborty, 2005).

The rhetorical devices prevent the producers to examine the knowledge provided by the formal institutions. This type of knowledge is “indisputable knowledge” (Callon, et al. 2009, p. 1), that creates uncertainties as the knowledge provided by the formal institutions is not disputed on the ground. For instance, the perception of forward [*alivre*] was made an indisputable phenomenon through hostility and suspicions. From fact to disputed fact, suspicion is created through

rhetorical devices. Rhetorical devices do not let ordinary citizens to create open public spaces and to examine the reliability of information.

The chapter focuses on the rhetorical devices used by the formal institutions and how the constructed local ideas of these institutions are created. Moreover, it is examined that the rhetorical devices created by the formal institutions were difficult to change as they became the representative of the formal institutions. Although the interests of the market groups changed, their rhetoric remained same. This inconsistency contributed to the mistrust of the ordinary citizens against the formal institutions.

According to Callon, et al. (2009), ordinary citizens have learned to mistrust information provided by the institutions. The isolation and exclusion of the producers reflect into their suspicious behavior. They argued that the suspicions of the inhabitants are encouraged by the ambiguous strategies of the institutions, as follows (p. 226):

The only rational strategy that remains open to ordinary citizens is that of suspicion. To change the relation of force unfavorable to them, and to force professionals to take account of their fears and explore the overflows brought about by science and technology, laypersons must establish public debates so that the anxieties, fears and doubts that poison their private lives are expressed.

Throughout “storytelling, forecasting and rhetorical devices” (Hollander and Gordon, 2006), the market groups categorize each other and develop symbols and metaphors to symbolize each other (van Gorp, 2007). The tools of categorizing, symbolizing, explaining, storytelling, forecasting and emotions, adopted from Hollander and Gordon (2006), are analyzed as the constitutive factors of rhetorical devices.

The dynamics of 2006 protests are examined with a focus on how rhetorical

devices create uncertainties. When, in 2006, Fiskobirlik was in a financially difficult position and the breaking point of the spot prices in a decreasing trend following the high prices due to the 2004 frost and the 2005 Fiskobirlik purchase prices.

Fiskobirlik and prices were created to symbolize the interests of the producers. The construction of the symbols is enforced by emotions (i.e., hostility), threat perception and suspicion.

The interest of market groups are subject to change as they are based on power (Galvin, 2006; Becker, 1963), interactions (Hollander and Gordon, 2006) and interpretation (Soffer and Ajzenstadt, 2010). The power is identified as the ability to produce the constructed ideas at the local market. Institutions create inefficiency and uncertainty through this construction. The chapter explains how rhetorical and textual devices produced by the formal institutions create destructive uncertainties.

The data and information used by the market actors in different hazelnut geographies are compatible, which reflects the common intelligence and source of information. This chapter presents an analysis of this social construction and how the rhetorical devices remain same in time whilst their interests changed in relation to the shift in balances of power that construct these devices. How is meaning socially constructed through categories, symbols and metaphors?

The chapter is structured as follows. First, the tools of social construction and rhetorical devices are explained and exemplified. The market groups are explained and how their power is executed is described. Next, the 2006 protest is analyzed as the case study of the construction of the rhetorical device. Following that, the changing interests are examined in relation to the changing market dynamics.

The Construction of Rhetorical Devices

The market system is constituted by the production of ideas, speculations and estimation, communication (every day speeches), and convention (social networks, power relations and cognition) that are materialized in the local market. The rhetorical devices become materialized through narratives, myths, collective memories, stories, script, and “stories spread through media” (Fiss and Kennedy, 2007). The rhetorical devices are tools to strengthen the particular social construction, such as statistics, numbers, wordings, and exaggerations.

Rhetorical devices are initiated by categorizing and sorting people into contrasting groups (Hollander and Gordon, 2006). The social construction in the hazelnut market features two groups, the producers and the business groups. Such a categorization excludes ordinary citizens and non-specialists. These groups refer to the formal institutions in which the agents work in their own interests.¹²⁰ These groups are formal institutions, organizations, unions or representative institutions such as the producer organizations and the exporter groups. The word “producers” is thus directly connoted as part of the producer groups rather than the individual producers themselves.

Market groups categorize each other and attribute symbols to this categorization through stories, forecasts and emotions. The market group may create the rhetorical devices to overcome an existing threat through creating new symbols and metaphors. In that sense, the market groups are identified as business

¹²⁰ The head of Başkan Gıda, in his memoirs, described the contentious relations with the agents as follows: “The support purchases have been realized by the price declared by the Prime Minister; yet, its costs have been covered by the national taxes. In fact, the hazelnuts that are stored by the support purchases belong to the state. Nobody has the right to say ‘I have 150mt of hazelnuts’ ... I am making war not with the state but with those who assume themselves to be the state.”

organizations, which include firms, Commodity Exchanges, exporter's unions, chambers of commerce, the Hazelnut Promotion Group, the Chambers of Agriculture, Fiskobirlik and the state.

Identities of Market Groups

Each formal institution or group might attach its own identity, perception, attitude, tension and personality to its ideas. The formal institutions create speculations, arguments and strategies by taking a position of defense or accusation. When one of the leading exporters described the representative actors in the hazelnut market, he used the vocabulary of the allies and foes of the hazelnut market as follows:

Let me list those who speak on behalf of the producers: The Chambers of Agriculture. They are the representatives of the producers, but each chamber chairman sees himself as a potential candidate for major or future members of parliament; hence, they have only one point of view towards the hazelnut, which is the increase in prices. They are not interested in good agricultural practices or efficiency or pest control, etc. Also, local politicians are the natural allies of the hazelnut. Local politicians of the party in government want price increases and those from the party in opposition want more increases in price to ensure favor in the electorate's eyes. The local bureaucrats such as governors are also potential politicians; additionally, the prime ministers and ministers are the natural allies of the producers. Nutella is our natural ally, it is not a competitor. They promote our hazelnuts in North America ... There are two ignorant groups in the hazelnut sector: academics and journalists. They assume that they know everything, but actually they don't. They use the word of Hamburg Burse a lot ... In the future; there will be a war between hazelnuts and almonds. We have to regain what we have given to almonds so far.

In light of this categorization, the exporters and producer groups differentiate each other. The socio-economic and welfare differences between the producers and exporters as well as the diverse interests of these groups also give support to this

construction of categorizing. The socio-technical tools of this categorization include reports and press releases of the formal institutions.

The producer groups always attacked the business group in relation to the unionization of the exporters as opposed to the weak positions of the producers, the lobbying power of the exporters and their forward contracts. When I mentioned this situation to one exporter, he criticized that “apparently they [*producer groups*] convinced you” in a sarcastic manner. This metaphor was also signified as the attribution of one producer “it is impossible for us to come together with the exporters, it is against the nature.” Such confirmed difference between buyers (exporters) and sellers (producers) also is depicted by the following view of one exporter: “The only aim of the exporters is to make profit and to become number one. I do not care anything about the producers, nothing. My resources are not the producers. I only care about the trade I do.”

The Chambers of Agriculture are part of the powerful institutions in the market in terms of information production, the construction of local perception, organizing the producers and to create the struggle and rhetorical devices with the business group. An 85-year-old man who is a hazelnut merchant and a former chairman of the Chamber of Agriculture of one of the big hazelnut cities told me his experiences of a lifetime of resistance and struggle. He told me his stories, reflecting on his courage, passion and persistence to resist:

I am 85 years old. I had 8-9 duties as a state officer, member of institutions, organizations and chambers. I do my business honestly ... I worked for the Chamber of Agriculture for years. When we had a meeting with Süleyman Demirel, the Prime Minister at that time, I unconsciously hit my hand on the table while speaking about the hazelnut price. Suddenly, he said ‘what’re you doing?’ in a challenging manner, I said that we had come to seek our rights in legal ways!

Similarly, the Commodity Exchanges are powerful agents in relation to their network access to other organizations and their ascendancy in the local market. The power becomes visible through the attitude of its officers, who are proud to be the part of such power in terms of capital, decision-making and easy access to the market and state networks. More importantly, they might be ranked in priority even before the state institutions. The power of these institutions is related to their access to the decision makers and their ability to produce information, data and reports. For instance, during the commission activities of crop estimation, the representatives of the Commodity Exchange were well-informed about the recent changes, data and reports (i.e., Inta SpaceTurk).¹²¹

Furthermore, I witnessed one phone conversation in which the city governor was not invited to one of the city organizations with the excuse of “Sir, sorry but the invitation list is very limited.” I was surprised to see the power of the General Secretary of Commodity Exchange over the Governor. The participation in such organizations arranged by business groups is identified as the sign of power in the local market. The participants of these organizations feel important, respected and powerful as if they are a part of the local authority. In fact, the producers do not consider such shared identity.

These institutions created an impression of authority and secrecy. The general secretaries of these institutions are the key actors in terms of public relations, management functions and their relations with the board members. When I entered one of these institutions, they joked with me saying, “Here the black covered book has appeared; let us continue after the inspector [*me*] leaves. You are venerated.” In fact, not all of the attitudes in these institutions were the same; hence, their

¹²¹ For more details, please refer to the Chapter 3.

characteristics were subject to change in terms of their levels of professionalism, conformity, openness and sincerity.

Interests of Market Groups

The interests of the market groups were derived from the basic identities of producer and business groups. The producer groups established their interests as the continuation of the state support, the prevention of low prices, the maintenance of the hazelnut production and the protection of hazelnut producers. The interests of the exporters were to achieve low prices, the on-time product delivery to the importers and to ensure the product quality. The interests of the importers, though, were the price stability, the exporter's commitment in the continuity of contracts; and the product quality.

The controversies between business and producer groups are depicted with an example of Or-Gi Concept initiated by producer groups and the response of business groups. In this categorization, the actors of the producer groups were the city directorates, Provincial Directorate of Agriculture; the actors of business groups were some of the exporters and Hazelnut Promotion Group.

In 2009, the Or-Gi concept, named for shortened forms of the names of the cities of Ordu and Giresun, was proposed by the governorships of the two cities. Three booklets were prepared with the aim to describe the main problems of the hazelnut market and the main questions asked by the locals. The triad, as it was called, included three booklets "The Hazelnut in 20 Questions," "The Guarantee in Price and Stock the 5x5 Formula," and "Do Not Tell Me a Tale on the Hazelnut."

The booklets examined the fundamental problem areas in relation to the hazelnut market and used the metaphor as “urban legends,” which were attributed as the “lies of the business groups”. Despite their attempt to examine the topics, even the governorship which had no authority on the price decision got involved in the pricing process by, for instance, declaring the so-called “ideal” price as 4 TL in 2009 in order to create public awareness and have a psychological impact on the pricing. One governor said, “We have positioned against price volatility, speculation and misinformation,” which were used as symbolic devices for the business groups. As a response to the Or-Gi concept, the business groups initiated their own arguments. The reports of each group featured statistics and graphs.

The Or-Gi concept was announced with a brief introduction that explained the aims of the project. Accordingly, the project defined four market actors, “producer, intermediary (merchant and exporter), regulatory body (TGB), and final consumer.” As a response to this categorization, the business groups, with a press release prepared by the Hazelnut Promotion Group, criticized their attitude to reduce the exporters to “simple” intermediaries by emphasizing the role of the exporters in terms of export development, standardization, and quality as well as employment, the solution of the problems in the market and policy making.

The relationship between the hazelnut price and the export volume became the symbolic device of the market groups. The positive relationship between the hazelnut price and the export volume was argued by the exporters in order to prove their arguments that if the prices become stable and low, the export volume would become higher. However, in a response to this argument, the Or-Gi booklet says “On February 28, 2009, the export revenue was \$779 million with the amount of

160,000mt of hazelnuts. In the previous year, the amount of hazelnuts exported was 138,000mt with export revenue of \$1.069 billion. Therefore, while the export volume increased by 15 percent, due to the pricing, it decreased by 27 percent the next year.” In response to these arguments, the business groups referred to the increasing purchase prices since 2004: “The high purchase prices increase production; and the increasing production decreases the hazelnut market prices; and the decreasing prices do not satisfy the producers and this leads to further increases in purchase prices.”

In these booklets, the legends of the business groups were depicted with drawings and storytelling method to explain the arguments in a simple language. For instance, the legends of the business groups, which the business groups were opposed, included that “high prices lead to increasing competitiveness of other hazelnut producer countries (i.e., Azerbaijan, Georgia)”; “low prices lead to high export revenues”; “high prices lead to increasing hazelnut usage as ingredient in chocolate making”; “high prices lead to the alternative ingredient, such as almond.” The chapter does not aim to discuss the relevance and accuracy of this rhetoric;¹²² instead, it is analyzed how they are created and how the market groups create uncertainties through the rhetorical devices.

Suspicion

The market groups attribute to each other through hostility, hatred and prejudice. The local expressions used by each group are constituted by cynicism and suspicion as if they act in vicious circles. These groups also use labeling as a strategy to build the local perception. The producer groups designate the business groups with strict

¹²² Throughout the dissertation, the relevance of these arguments finds their answers.

pejorative attitudes as “pre-sellers!” [*Alivreci!*]. Throughout the fieldwork, the market actors told stories and narratives about events in which they had not participated in person. I was told narratives about the antagonism between the merchants and producers.

During the in-depth interviews, I witnessed prejudice by aspersion, bad feelings, and hatred. My subjects addressed their feelings as if their “enemies” were sitting in front of them and as if they had been in an active fight with them. The struggle among the market groups emerged through words including aspersion, insult and gossip and through body language and facial expression reflecting hatred and contempt. The examples of their attributions include “media monkey,” “his improper account was covered up, here, in small places, these things are easily covered up,” “he’s his little master,” “He makes it [*a hazelnut company*] number one in Turkey with cheap hazelnuts,” “They are blood sucking leeches. They are our colleagues, but they are cribblers. They are carrion crow”; “He speaks like a bandit. The managers there bribe.”

In the memoirs of the head of Başkan Gıda, he described how the exporters were opposed to the general local connotations like *alivreci*, profiteer, monopolist and usurer. He said, “They try to make us out to be an enemy of the producers.” He was against the confusion of the “real” exporters with those who were “unfortunately irrelevant to the sector and who were profiting from the weakness of the market by saying ‘let us sell our hazelnuts at the price of \$500-600 for three to five years whether or not the price falls to \$100.’”

The hazelnut market produces direct insiders who are persistent, passionate and sensational individuals with their wordings and attitudes. Contested and explicit

attitudes of the informants easily prevented me from being a complete outsider. During the field work, I was directed by the participants toward their so-called “friends” and listened to them speak with hatred of their so-called “enemies.” Common phrases were, “He’s the friend of the producers, go and speak with him!” “For years, the exporters been engaged a war against Fiskobirlik,” “We knew what we’ll plant when we begin to fight.” The inner dynamics of this hostility are based on the very locality of the market based on the proximity between the producers and the business groups as well as on the visibility where the rhetorical devices become more apparent.

Similarly, I frequently was asked what I had learned from the hazelnut market. The reason for these questions, which would be either from business or producer groups, was to see my point of view. The dichotomy of friend and enemy became visible with such dissociation. In fact, this attitude appeared especially among the business groups due to their marginalized position in the eyes of the producers groups and producers. Some of them provided me several documents to read through and offered to meet them later in order to distinguish what I had acquired so far from the so-called realities of the market. Despite the difficulty of being an outsider, I analyzed the rhetorical devices from the objective stance of a complete outsider point of view. I tried to remain neutral to the hostility between these two groups.

Forecasting

Forecasting is related to the next action of the categorized groups and these are related to each other’s identity and position (Hollander and Gordon, 2006).

Forecasting is associated with a particular threat that may come from the market group. Threat may include an unexpected and unknown behavior in relation to dramatic decreases in spot prices, meeting with politicians, and unknown partnership among market groups, press release and accusation. The suspicions and possible threats were described and investigated by the market groups. The investigation is conducted through daily conversations, reports and press releases. Therefore, the market groups create discussions and strategies against each other to turn unknowns about each other into indisputable knowledge.

Economic exchange occurs within a field of information in which actors struggle to acquire accurate information or to create new or to manipulate existing information. The focal point is to reach the valuable information as a strategic factor in speculative exchanges. In such an environment where there is no accurate information, the market groups forecast the future activities of each other.

Considering the prices, threats for the producer groups might be the dramatic and unexpected decreases in spot prices; whilst threat for the business groups is the unexpected government intervention and the high support prices. In the local market context, the meaning of the prices is constructed on the basis of identities and interests, which are conveyed through symbols, metaphors and emotions such as hatred and hostility against the business groups. According to Hollander and Gordon (2006), the construction of the values and norms starts with “the data of everyday, real-world conversations, and analyzes sequences of interactions, not simply individual utterances.” Information is disseminated through small talk about taken-for-granted everyday issues, personal circumstances and local matters, through comments on events. Everyday experience covers the issues related to uncertainty

concerning economy, family, and political issues (Zonabend, 1993).

By forecasting, the formal institutions produce proposals and expectations by manipulation, inaccurate information production and speculation. The local perceptions are created on the basis of uncertainty about the truth and accurate information. At the local level, the individuals do not know how accurate the information is.

Despite the fact that economists seek to find out the truth with “useful” models (Maki, 2004), what counts as accurate information is a proper subject for investigation by the sociology of knowledge and thus by the anthropology of uncertainty. Truth and power are connected; hence, what makes the truth is a function of social power.¹²³ Truth consists in an agreement to a declaration by a relevant powerful group. Truth is shaped and manipulated by the local struggles between formal institutions. For the social construction theory, *truth* becomes the constructed *reality* that is perceived as truth by the individuals on the ground.

The hostility between the producers and the business groups was more visible during the times when the state declared the purchase price. The bargaining becomes more vicious among the key influencers in order to attract the attention of the state representatives who are the decision makers (i.e., government representatives). There are numerous stories that were told depicting the aggression between the groups on the ground. One of these stories took place during the times of the state purchases when the state representatives had declared the purchase price of hazelnuts. During the 1990s, one year, the Ministry of Industry had promised the producer groups that

¹²³ For this discussion, please see Maki, U. (2004). “Some Truth about Truth for Economists and Their Critics and Clients,” in Mooslechner, P., Schuberth, H. & Schirz, M. *Economic Policy under Uncertainty*. Cheltenham, UK, Northampton, MA., USA: Edward Elgar.; For a discussion on uncertainty as intangible knowledge sharing in relation to property rights, Choi, C.J. & Berger, R. (2007). “Globalization, Property Rights and Knowledge Networks”. Retrieved on March 15, 2009 from www.idc.ac.il/publications/files/315.rtf.

“if the purchase price is good, I’ll come and declare the price.” Just before the launch of the new season, the producers groups received a call from the minister say that he would come to declare the price. Then, they knew that the price would be high and they became excited about his arrival. Finally, the minister arrived and declared a satisfactory price for the producer groups, but a high price for the exporters, which made the business groups very upset. After the minister left the room, one exporter complained about the price that had been declared by the minister. He said in a mutinous tone, “Here is the key to my factory that provides employment, living and food for the locals.”

As the tension grew higher, one representative of the producer groups lay into him and a struggle broke out. These narratives about the past struggles between the groups include stories of crime, physical injury and even murders. This keeps the meaning and memories alive. The storytelling proves how solid, live and harsh the construction of the ideas on the ground can be. This aggregation was the result of the forecasting. While the business groups did not forecast such a high purchase price, the producer groups did not want any threat that may have come from the business groups against their forecast of high purchase price.

By forecasting the groups plan to overcome possible threats that might come from each other. The threats might include the message that aims to convey the necessity of alternative production areas, the reasons for the change in the market, and the common impact of the current market conditions on each group in the market. The business groups, for instance, organize seminars and training sessions. The aim is to create an agenda with the idea that the hazelnut is not the only option for the local population. Also, reports are produced and meetings conducted to

defend their position.

The forecasting creates prejudices on the side of the decision makers. Each group struggles to create prejudice against the others and also re-constructs the prejudice created towards each other. The bargaining and ways to impress the decision makers are based on rhetorical devices. The attribution of each group towards each other also leads to not only misinformation but also disinformation on the side of the decision makers. The misinformation creates not only uncertainty but also market instability and distortion in the market. During the meetings of the market groups with the decision makers, for instance, at each presentation, the decision makers act as if they have learned their information from scratch and feel, as if they did not know anything. This creates confusion and distraction, which is constructed through rhetorical devices of each market group.

The Socio-Technical Controversy: *The Case of 2006 Protest*

On July 30, 2006, in Ordu, the largest hazelnut-producing city in Turkey, thousands of producers joined in protest against changes in the hazelnut market. The protestors included hazelnut producers as well as producers of other products from all over the country. The protest was organized and its debates led by the Chambers of Agriculture.¹²⁴ At the protest, nobody in the organizing group expected that some of the participants would get out of control and over-react. However, the protestors strung up an effigy of a well-known exporter and burned it. Toward the end of the

¹²⁴ The Chamber of Agriculture is used as a general concept that refers to the institution, rather than as its specific brunch in a certain district.

protest, the tension increased and some of the agents blocked the main highway for several hours (Fig. 14).



Fig. 14: The 2006 protest in Ordu

Source: Fiskobirlik, 2006.

The protestors were organized to speak out against the decreasing hazelnut prices and the failure of Fiskobirlik to purchase hazelnuts and pay the producer's debt in return. With Law No. 4572, the agricultural cooperatives and unions would become independent, financially autonomous and self-managed entities. In the public speeches to be held in Giresun on June 18, 2006 and Ordu on July 09, 2006, the tension increased when the Prime Minister countered Fiskobirlik and accused the institution of having put itself in this situation.

The protest was a warning mechanism to deepen the knowledge of the government on the hazelnut market and reactions of the producers. A week later the

protest, the government assigned the Turkish Grain Board (TGB), a state institution, to make support purchases on behalf of the state. The action of the government was a *measured* action, that is, an incident of measured decision-making given under uncertainty instead of a clear-cut and final decision (Callon, et al. 2009, p. 191). However, this action was a temporary measure in the management of uncertainty. Uncertainty was introduced by the controversies created by the protest. Just before the new crop season, Fiskobirlik's position was uncertain. The removal of a regulatory agency from the hazelnut market would be prevented by the reactions on the ground. The government was to manage the risk of losing producer's vote in the election in 2007. The measured action of the government resulted in the high percentage of voting for Justice and Development Party (JDP) in the next year's general election in 2007.

The role of the Chambers of Agriculture in the 2006 protest might be identified as the ability to create the controversy through rhetorical devices. With the 2006 protest, the Chambers of Agriculture apparently aimed to protest the liberalization process in the hazelnut market. In fact, what they intended was to ensure the power maintenance of producer groups. They forecasted that the symbolizing impacts (i.e. the weakening of Fiskobirlik power and the decreasing prices) had been giving signs of the increasing power of the business groups.

Since the beginning of the 2000s, the institutional transformation has been problematic for the agricultural sector. However, Fiskobirlik has continued to be involved as a regulatory institution to purchase hazelnuts from the producers at higher purchase prices than the spot prices. In fact, in 2006, Fiskobirlik fell in financial difficulties. Moreover, in the hazelnut market, the market optimism is not

created on the basis of the close relation between the business and producer groups. The hostility between the market groups has risen with higher prices in the export season of 2005-2006.

The background of the protest included hostility constructed through symbolic connotations based on the categorization between the market groups. The idea of the 2006 protest was constructed through categories, symbols and metaphors. These devices created the “we” feeling among each group by dividing the market into producers and exporters. The metaphor of “looking after our hazelnuts” [*findığına sahip çıkmak*] was used by the producer groups. The ideology of the meeting was constructed by the Chambers of Agriculture. One of the reports of one Chamber of Agriculture included the statement as follows:

The hazelnut producers are out of patience. If there is somebody to pay the payoff against such failing patience, it would not be the producers. There are cases in history. We are ready to confront anything on this issue. Politicians should be transparent. The Prime Minister gives instructions but nobody fulfills them. Those who say that the Prime Minister gave a second instruction should explain the reason why the first one has not been implemented. Either our Prime Minister has been sabotaged or the hazelnut goes also beyond the Prime Minister.

This ideology was successfully conveyed to the individual producers. A producer pointed out his bravery, which he had shown during the 2006 protest, while revealing his personal attitude at that time:

We blocked road traffic for 16 hours. There were funerals and deaths. The police chief was dismissed. But after five or six months, the number of parliament members rose from 4 to 5 in the general elections. I was blacklisted. We were called terrorists; yet we just sought the return of our elbow grease. In Ordu, the Prime Minister said ‘go to Fiskobirlik [*to call them to account*], you didn’t give it to me, did you?’ The price went down from 4 TL to 2 TL. But I voted for you ... We went to Manisa with four buses. Their product was not

worth money, either. These [*the developments in that period*] had also a certain influence. The crowd there was not the native people of Ordu. Even the opposing party did not protect us. If the police chief had ordered them to open the road, they would have lynched him. The newspapers wrote it. Support came from the gendarmerie of Giresun. They, of course, needed support; how else could they cope with 120,000 people? (Appendix, 25).

The 2006 protest was a socio-technical controversy. The technical aspect of this controversy was based on the economic reforms and the restructuring of the market (i.e., Fiskobirlik becoming financially autonomous). The social aspect of this controversy was based on the reconfiguration of the local power dynamics; the creation of rhetorical devices; and the involvement of the producers in the protest.

The Chamber of Agriculture attempted to draw attention to the public opinion as a “metaphorical linkage” (Hollander and Gordon, 2006). The public opinion and the attention of the government were linked to the ‘problem’ of hazelnuts. The categorization, symbols and emotions led to suspicion and mistrust that result in uncertainty. This was uncertainty in forecasting of market groups about their interests and possible actions. Uncertainties in these times included the position of Fiskobirlik; the gap of a regulatory agency to purchase hazelnut; and the prices. Fiskobirlik was in a financially difficult position and the reaction of the Prime Minister against Fiskobirlik exacerbated the uncertainty in the future of the institution. The decreasing prices were another threat for the producers that contribute to uncertainty.

The symbolizing was significant, especially in relation to the positioning of the individuals to market groups. Symbolic meanings in the hazelnut market include metaphors. One of the participants likened this struggle to a folklore play. Accordingly, “the actors in Ordu and Giresun act face-to-face while they act side-by-

side in Trabzon; hence, that's why they [*referring to the economic development of the city of Trabzon*] are in front of us.”

The controversies in the 2006 protest created two symbols. These were Fiskobirlik on the side of producers and C.Z. (a leading exporter in these times); and, on the side of the exporters. These symbols were embodied through the market prices.

First, since 2005, Fiskobirlik has been one of the most powerful institutions in the market. Its power is based on the ability to intervene in uncertainties such as its regulatory role, purchase policy and ability to set prices. Again, the Chambers of Agriculture symbolizes power in terms of their proximity to state institutions and their ability to get involved in the policy-making processes. The 2006 demonstration protested the difficult position of Fiskobirlik. However, this was not Fiskobirlik as an institution that was supported; instead, this was the power that Fiskobirlik possessed as a symbol. Fiskobirlik was a reference enterprise not only in the purchase of hazelnuts, but also in processing and exporting. For some of the producers, the institution had become the guarantor actor with its prices that were higher than those of the spot prices.

Until 2006, the organization had been a powerful institution in terms of decision making, organization, manipulation and information creation. Similarly, the hostility toward Fiskobirlik had been derived from the perception of Fiskobirlik's power over purchase prices in the past and its possession of the hazelnut stocks. However, in 2006, Fiskobirlik had become unable to pay its debts to the producers and to give its hazelnut stock as collateral to provide credit financing.¹²⁵

¹²⁵ Fiskobirlik was still in a position to pay the debts to the producers. In 2006, Fiskobirlik recommended the producers to pay back the credit by becoming a guarantor institution. Since the bank credits were used on behalf of the producers, the addresses of the bank letters had become the

The collapse of Fiskobirlik also pointed to the controversies within the institution in terms of the board decisions and activities. The former members of the Fiskobirlik board claimed that this was related to the creation of the lists in the elections of the Fiskobirlik board from 2003 to 2007. In these periods, the board members were selected from the members who were from the party in opposition. The former president of the Fiskobirlik board mentioned that he was asked by the government to select the board members from the party in government. However, the board members of Fiskobirlik were elected by the delegates and thus there was no sole autonomy to prepare the candidate list. Each cooperative elected its board on the basis of their political weight and distribution.¹²⁶ Therefore, the former president could not create the election list with a top-to-bottom approach in spite of the delegates. The former president tried to overcome this obstacle by offering two possible positions for the candidates from the party in government: one in the board and one in the audit council. However, these suggestions were rejected by the delegates.

The struggles within the institution contributed to the controversy where the struggles were taken as the contentious encounter between Fiskobirlik and the government. Nevertheless, when it came to the year 2007, the President of the Board who was elected was from the party in government. Although it was thought that, if the board members had been from the party in government, the government would

producers. During the summer 2009, the producers who were the creditor of Fiskobirlik's debt and the debtor of the bank credit started receiving bank letters that included the payment of principle and heavy interest.

¹²⁶ To become a member of the board, it was required to deliver hazelnuts to Fiskobirlik continuously. Therefore, it was not necessary to know the hazelnut and the market processes to become a board member.

have helped Fiskobirlik find credit financing; the financial difficulties could not be solved.

For the business groups, Fiskobirlik was perceived as a “market-distorting competitor” that set the purchase price higher than the market price. Considering the relations between Fiskobirlik and business groups, the depth of the hostility between the producer groups and the business groups becomes apparent. The negative image of Fiskobirlik reached its highest level, in the eyes of the exporters, in 2005. In one report, the following sentence summarizes the general attitude of the exporters toward Fiskobirlik: “During the restructuring period of agricultural cooperatives, when Fiskobirlik started acting like a real cooperative and demonstrated considerable improvement, since 2005, the managers who are unable to anticipate the future will put the institution into a deadlock again.”

In fact, the distortion can be seen in the arguments expressed by each group throughout the reports. In these reports, the statistics that are only the most relevant to the main argument are revealed. In 2006, Fiskobirlik, in the press release, defended itself against the accusation that the TGB and Fiskobirlik had taken 205mt of shelled hazelnuts off the market. Fiskobirlik claimed, “They did not perform such selling. Such arguments that had been frequently applied in the past years were derived from the actions through ungrounded claims and gossip to affect the market that is in a rising trend.”

The hostility perception of the market groups toward each other mostly was created through misinformation as well as disinformation. Similarly, the Black Sea Exporters Union published another press release on August 22, 2005 in relation to hazelnuts returned from the Czech Republic. The accusations came from the

producer groups: “The news on the returned hazelnuts is speculative in order to manipulate the high price trend,” “That is a scenario; there are no exports to the Czech Republic,” “This news aims to speculate against the high prices.” The press release aimed to “condemn these arguments made without any research and with no responsibility.” However, according to the release, 20mt of the total amount (62,800 kg) had been returned due to aflatoxin levels that were higher than EU standards. The press release aimed to answer the accusations against the business groups.

The antagonism and enmity mainly originated from the ideational discrepancies that had arisen from personal reactions, the diversity of opinions and being excluded from a given concurrence of opinion. Throughout the institutional reports and press releases, both groups considered the impacts of ungrounded purposeful accusation toward one another.

The second symbol was C.Z. the owner of one leading hazelnut companies. He came to symbolize the business groups and was constructed as a symbolic device by the producer groups. He was in the board of the International Nut and Dried Fruit Foundation. In the local market, C.Z. was known as the consultant of the Prime Minister on issues related to the hazelnut sector. However, he was not officially appointed in such a position and responsibility. At the 2006 protest, the protestors aggressively oppose him. They hung him in effigy from a utility pole. They also carried banners on which were written “betrayal!” His name came under strong attack from the producer institutions, which resulted in hatred of from the producers.

Besides the numerous press releases published by Fiskobirlik with harsh criticism of the government, the Chambers of Agriculture also pointed out the exclusion of Fiskobirlik in order to attract public opinion. The discussion had started

in 2006 just before the contested protest in Ordu. The name of C.Z. was closely related to Fiskobirlik. He was said to be a person who was responsible for manipulating the decision of the state not to allow Fiskobirlik to benefit from a certain amount of the state credits that might have been paid in exchange for the payment of some of Fiskobirlik's debts. Also, according to the head of Fiskobirlik, in 2003, Fiskobirlik had proposed an export fund to be able to provide finance for Fiskobirlik. According to Law 4876, Fiskobirlik could provide credit financing in the exchange of hazelnuts as security to State Credits, when the hazelnuts were sold, Fiskobirlik would pay its debts to the State Credit. However, this mechanism did not work efficiently and the producer organizations were unable to pay back their debts. In light of this finance problem, Fiskobirlik offered a system of export fund. The exporters opposed this proposal, as the fund would increase the hazelnut prices. The rejection of the proposal was credited to C.Z.

The name of C.Z. was mentioned throughout the price changes in 2006. The local perception created on the ground was based on the arguments that two speeches by the Prime Minister affected the prices. In Giresun on June 18, 2006 and in Ordu on July 09, 2006, the Prime Minister expressed negative connotations and manner toward Fiskobirlik and referred to the tension between the government and Fiskobirlik. In July 2006, the spot price realized in Giresun Commodity Exchange decreased from 3.73 TL (June) to 2.4 TL (Figure 6). C.Z. was used as a symbol to confirm the relationship of the business groups with the state institutions and how the price decreases were related to the manipulation of the business groups.

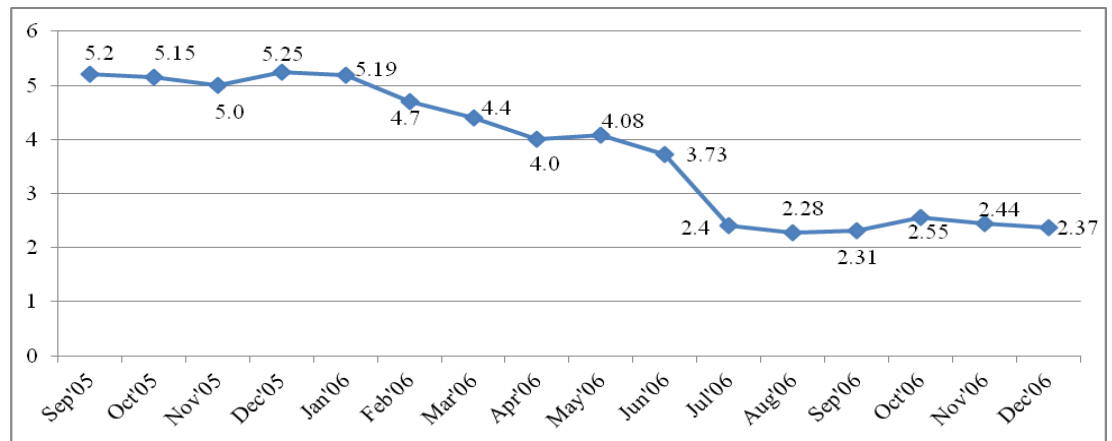


Fig. 15: Spot prices at the Giresun Commodity Exchange (September 2005 – December 2006)

Source: Fiskobirlik, Economic Report, 2006.

The reasons for the price decreases were due to two factors. These are the higher crop level than the previous years, the speculative attack of the price setters and thus the intervention of the exporters on the high prices executed in 2004 and 2005 due to the frost. Although, in the following months and years, the prices increased (due to the purchase prices of TGB); the rapid decreases of price symbolized for the producers who assumed that the prices would continue at the same levels as they were during 2004 and 2005. The rhetorical devices became more powerful due to the active function of C.Z. in the hazelnut export process. Regardless of whether he was responsible or not, the name came to symbolize how rhetorical devices became metaphors for the struggle between market groups.

Prices have symbolic meanings that are constructed through power relations (Velthuis, 2003). Therefore, the extent to which “knowledge” became a rhetorical device depended on “imaginaries” enacted as actual networks of practices so that calculations, estimations, subjects, and social relations became real activities. In

other words, “social entities are in some sense effects of discourses” (Fairclough, 2001, p. 3, 4; Sayer, 2000). In July 2009, just after the initiation of the law on the Hazelnut Strategy, through which the free market principles were enacted, one institution representative said:

The business group wants to set the prices at 3 TL; the producer groups want the prices to be around 4-5 TL. Now, we'll struggle for this in the following three months. The business group will execute all of their arguments to set the prices at 3 TL. The producer groups will organize meeting ... prepare TV programs and VTRs to sell the hazelnuts at 4 TL. After August 20, the market wars will start here (Appendix, 26).

On the day of the protest, although the speaker, who was the head of the Chamber of Agriculture, announced the ending of the protest, a group of individuals continued the protest by blocking the only highway connecting the cities of the Black Sea region. The protestors included local hazelnut producers and producers of other agricultural products from other cities. The aggressive behavior of these protestors spun out of control. At the end of the day, many people were detained and injured as a result of the police intervention.

The 2006 protest had a number of significant results. First, just one week later, on August 31, 2006, the TGB was assigned to purchase hazelnuts on behalf of the state. Therefore, the massive protests led to the inclusion of the TGB with the aim of continuing the state presence in the market through support purchases. The main motive of the TGB inclusion can be seen from two perspectives. From the state perspective, the state acquired the ability to intervene into the TGB's activities, as opposed to Fiskobirlik. From the market perspective, the ability of the state's intervention ensured that the purchase prices were announced late and the purchase

policy was conducted on a gradual basis. These policies let the market constitute the spot prices to eliminate the impact of purchase prices on them.

The gradual purchase policy aimed to allow the exporters to purchase the necessary amount of hazelnuts at lower prices than the prices of Fiskobirlik times. The TGB's price tiers were determined in four months period with an increasing price system. However, since the producers could not wait for the following months to benefit from higher prices and the TGB had given late appointments (i.e., 4-8 months later)¹²⁷ they had to give their hazelnuts to the merchants at the spot prices.

Second, with the inclusion of the TGB, Fiskobirlik was excluded from the market and was at a loss to overcome its financial troubles. Efforts were made to solve the financial difficulties of Fiskobirlik through attempts to acquire bank and state credits. However, in accordance with Law 4876,¹²⁸ Fiskobirlik was unable to provide credit financing. After 2006, Fiskobirlik was excluded from the market struggle in terms of price, information and rhetorical device creation. The institution that represents the producers was replaced by a state institution. TGB acts on behalf of state not of producers.

Third, the power balance changed in the market. Fiskobirlik was a powerful institution that purchased hazelnuts at the beginning of the crop season. However, when the amount of crop was low, the purchases at the beginning of the season led to price increases. The purchase policy of the TGB was determined in such a way that the institution would gradually purchase hazelnuts. However, the problem of the TGB was its lack of knowledge and experience with the hazelnut product. One

¹²⁷ The TGB purchases created uncertainties in the local market and a lot of losses for the state budget, which will be discussed in the next chapter.

¹²⁸ Law No. 4876 on the Restructuring Farmers' Debts Law and Agricultural Credit Cooperatives (ACCs) was initiated in order to restructure the credits provided by Ziraat Bankası. According to the law, the Bank became discharged from providing funds to ACCs with outstanding debts.

solution was proposed, which was the integration of Fiskobirlik's expertise on the product during the purchases. In fact, as the business group has emphasized the total exclusion of Fiskobirlik to eliminate any possibility of the institution's purchase, the institution also was removed from the support of technical expertise.

After the 2006 protest, the market reconfigured new controversies and uncertainties. The measured action of the government by initiating TGB was not the clear-cut decision made in the conditions of uncertainty. The measured action was the temporary solution, which showed that the 2006 protest deepened the knowledge and understanding of the government about the hazelnut market. However, as the measured action was not the final decision, after 2006 protest, new controversies and uncertainties were created, which will be discussed in the following section.¹²⁹

The Rhetorical Devices and Changing Interests: *from 2006 to 2009*

The rhetorical devices of the formal institutions that represent their identities remained same, even though their interests changed. In 2009, when the Hazelnut Strategy was initiated, the producer groups involved in the preparation of the Strategy and accepted the changes proposed by the Strategy. What they accepted were against their pre-defined and established identities that they reflected in their rhetoric. The free market principles, ultimately, were agreed on during the preparation of the Strategy. However, the producer groups did not organize protests and did not create contentious controversies. Fiskobirlik and the Chambers of Agriculture did not challenge the regulatory changes, especially those against the free market principles.

¹²⁹ For a discussion on the concept of measured action, please see Callon, et al. 2009, p. 191-205.

After the launch of the Strategy, they acted as if they had been against the decision. The producer groups reacted as if they had not been involved in its making. Despite the fact that Fiskobirlik and the Chambers of Agriculture, as the producer groups, had been involved in the technical formation of the Strategy (i.e., via the National Hazelnut Council), they had not shown any strong resistance to the process. Although they opened the Strategy by criticizing the exclusion of NGOs and civil society institutions from this process, these institutions did not persist. In the public speeches and press releases, the producer groups argued that the Strategy document had been submitted in informal ways and that “we have tried to share our ideas and opinions on the Strategy.” The attitudes of the producer groups were inconsistent.

There were two basic reasons for the change in the interests: the financial difficulties of Fiskobirlik and the release of the restricted budgetary resources of the Chambers of Agriculture. The Chambers of Agriculture sought to acquire financial strength. Therefore, the so-called compromise was nothing more than a bargain to regain its financial position and to accept the free market principles.

The Farmer Registration Certificate was a document acquired from the Chambers of Agriculture in consideration of an annual subscription fee. In cases where the certificate in question was demanded, the producers had to acquire it from the Chambers of Agriculture in consideration of the subscription fee. Thus, the certificate in question constituted a power device produced by the Chambers of Commerce.¹³⁰

¹³⁰ The Chambers of Agriculture are powerful institutions in the local market. When talking about the power of Chambers of Agriculture, I learned that they have the authority to carry weapons.

However, as per a law amended in the year 2007, the demand necessity of the certificate in question was abolished.¹³¹ The appropriation accounts of the Chambers of Agriculture were frozen from May 2007 until May 2009. For the period following the protest, they admitted the Chambers' current unresponsiveness by saying "the appropriations of the chambers were suspended after the protest. This is why the chambers are afraid, why they refrain." According to the law, which approved the charge of membership fees to producers by decision of the constitutional court, the Chambers of Agriculture had the exclusive power to issue farming certificates. The struggle of the Chambers of Agriculture concerning this cancellation started; they applied to the Constitutional Court, and these provisions eliminating the obligation to receive the Farmer Certificate from the Chambers of Agriculture were cancelled in 2009.

There were many reasons that induced the producers to get farming certificates. The Constitutional Court Decision stated that the farming certificate given by the Chambers of Agriculture was proof of whether or not the producer had carried out farming activities in the current year, and that it also certified, in an up-to-date manner, that the farming activity had been maintained. In addition, the farming certificate, which was free of charge, since it satisfied that "membership of chamber of agriculture and farming certificate are integral, and they are identified with each

¹³¹ With Article 3 of the law issued on May 15, 2007 under no. 5661, the additional Article 2 of the law providing the clause "public and private establishments, banks, cooperatives, unions and similar institutions making monetary support payment given by the State to Farmers, granting real and monetary agricultural credit to farmers and procuring contracted production to the farmers, are under the obligation to demand from farmers located at places where a chamber of agriculture exists, the farmer certificate bearing the certification of the current year, which is received from the relevant chamber of agriculture free of charge," and the sentence "Those failing to received farmer certificate from the Chamber of Agriculture, or from Provincial and/or District Directorate of Agriculture, for places where no Chamber of Agriculture exists," included in the last clause of the Article 53 of the income tax law issued under no. 193, were cancelled, and the following clause was provided with article 2 of the same law: "No farmer certificate is sought from farmers registered at the Farmer Registration System of the Ministry of Agriculture, in agricultural support and/or credit use transactions such as all kinds of real and monetary support, advance payment, subsidy, premium."

other,” and offered “as the evidence that the person in question practices farming,” indirectly forced the producers to pay a subscription fee to the Chamber of Agriculture. By courtesy of the above-mentioned decision, the Chamber of Agriculture regained the power struggle it had lost following the 2006 protest, in 2009 when they compromised on the Hazelnut Strategy.

At the beginning of the season, the producers who came to the Chambers to give their products to the TGB were also informed on the amount of membership fees payable for past years. In 2009, when the new hazelnut law was announced, the visits to the Chambers gained even more importance when it was made mandatory for the producers to apply to the Provincial Directorate of Agriculture together with a farming certificate so that they could receive the aid paid per unit area. The producers were required to obtain farming certificates from the Chambers so that they could benefit from the aforementioned unit area-based support. In order to get a farming certificate, it was mandatory to pay any previous membership fees.¹³²

Despite being up on the details and the preparation of the Strategy, Fiskobirlik and the Chambers of Agriculture criticized the proposals and regulations initiated by the new law rather than opposing it during the period of its preparation. In the press releases of these organizations, the Strategy was called a betrayal and they criticized its methodology, context and targets. The only common point among the groups seems to have been a strategy would help delimit the production areas and initiate free market principles. The Chambers of Agriculture created a damning rhetoric with the common declaration prepared by the Turkey Chambers of Agriculture on August 24, 2009. It said that, “Just before the new crop season, the producers have been

¹³² These discussions will be detailed in the following section.

convicted to the merchants and the merchants dictate the terms to the producers. Since they were uninformed, they were left unprotected and helpless.”

Nevertheless, the Chambers of Agriculture decided to announce the common decision of the Turkey Chambers of Agriculture against the Hazelnut Strategy. Instead of organizing big protests, the Chambers announced a press declaration in each hazelnut city. I knew that one was due to start in the city square at 12:00. The Chambers of Agriculture of the city had sent SMSs to 4,000 members; however, the number of people who attended was low. The low participation was not related to the reluctance of the members to attend the meeting. Instead, it was related to the weak and reluctant organizational activities of the Chambers of Agriculture, which was the institution with enough power to organize the people, as they had in the 2006 protest. There was some passive participation on the part of the producers. The participation of the producers was aimed to make the weak resistance visible to the public opinion.

While this seems irrelevant for the start of the declaration, we, with the employees of the chamber of agriculture and the participant producers, sat in the tea-garden by the meeting square and waited for the meeting to start. We were under tall trees as the weather was a very hot and humid. Those sitting at the tables around us had come for the meeting, mostly officials of agricultural chambers and some producers. I listened to them talk: “What will they plant in the villages if they uproot hazelnut? The alternative is uncertain” ... “No one is picking [*hazelnuts*] now” ... “Anyway, there isn’t anybody to picture in the villages.” The recent changes of the governor of Giresun and Ordu also were talked of: “While the governor distributing white appliances in the East is rewarded, governors in the cities where the JDP lost the local elections have been expelled.”

During a chat with some district directors, someone with a tape-recorder drew near and asked who I was: “Are you a journalist? I just saw you” I had to introduce myself. When one of those around me asked: “she will be staying with us in the villages for 1-2 days, are you special intelligence?” The person with the tape recorder went away without prolonging the talk. I ask: “Is the intelligence this good?” He answered, “If so, then the situation is good.” We laughed. This incident, which I did not take to seriously, was confirmed by similar stories later. I heard that after the 2006 meeting, many people in the region, including the representatives of the Agricultural Chambers, were indexed and followed from a distance for a time. The 2006 meeting had created a fissure in terms of security.¹³³ Even though it was clear that no rough incidents would occur during the meeting, the vigilance could be stated as the effects of that period and as part of the withdrawal of the Chambers of Agriculture.

The well-dressed chairman appeared and approached the producers. He sat down at the table of the producers with a frustrated attitude. Numerous producers came near to shake his hand. I observed how the producers perceived his personal power when they adopted a poor, diffident and helpless attitude in front of the chairman. They even seemed to be bashful about shaking hands with him. The power, in fact, was related to respect and veneration and how obliged the producers felt toward him with the idea that he was the person who supported their rights on TV channels, newspapers and at the meetings.

Observing the change in the chairman with whom I had met a few times in 2006 when I had first come to the hazelnut region stretched my senses. That man,

¹³³ For an analysis on neoliberalism, security and state actions in relation to the 2006 protest, Gambetti, Z. (2007). Linç girişimleri, neoliberalizm ve güvenlik devleti. *Toplum ve Bilim*, 109, p. 7-34.

who, in 2006, immediately after the 2006 protest, had spoken with fervor in a loud voice excitedly gesturing with his arms, was wrapped in an entirely different person this day. The chairmen of the Chambers of Agriculture are held in reverence by the producers based on the perception that the chairmen are more influential, and who are among the biggest producers and also represent the producers before the state organizations. The chairmen are famous people in the region and everyone knows them. A strong hierarchy and a high power distance might be identified in the decision making and working structure of the Chambers of Agriculture.

When the meeting time came, we all stood up, walked towards the square, and shook hands with the chairman. He said to the person beside him, for the declarations being distributed, “Also give a place to Ebru.” There was a camera in the chairman’s hand, when he was reading the declaration he gave me the camera and I recorded the entire speech. While proceeding to an area which gave the impression of a small amphitheater in the crowded square, the chairman prepared to read the declaration. The chairman took the copy of the declaration from me and advanced into the square to read. The declaration was a text that very clearly and in plain language described the preparation process of the strategy, the existing conditions and the forecasts. A few points which can be emphasized from the text are as follows:

With the free market, uncle Hasan will go down to the market, go to the merchant, how much - 1 TL, how much -1 TL ... we prepared this explanation last week, Monday, Tuesday, then the prices at the exchange fell ... from 4 TL to 3 TL ... Our opinion was not taken ... The kitchen for this is obvious; we saw the advertisements in the papers (Appendix, 27).

The declaration stated, “The opinions of the Turkey Chamber of Agriculture and other producer organizations have not been asked.” However, the Chambers of

Agriculture have become part of the negotiation and preparation process of the Strategy. The deviance at this point actually was related to the institutions, which witnessed all manner of problems and processes, looking through the window that opened to the producer with a different attitude.

The declaration continued: “We presume that the kitchen of this strategy is not the Ministry of Agriculture. This does not resemble the kitchen of the Ministry.” By the word “kitchen,” he meant the role of the business groups and their impact of the constitution of the strategy; also fact-finding processes and the activities of the Hazelnut Promotion Group through the reports, the meetings and the newspaper advertisements.

In fact, he was one of those who had attended the fact-finding conferences and whose institution had been represented in the meetings, as well. Although the opinions of the producer organizations were not asked by the state institution directly, Fiskobirlik and the Chambers of Agriculture had been represented in the National Hazelnut Council, despite with a minority. This also was reflected in the changing attitude of the representatives of the producer groups, Fiskobirlik and the Chambers of Agriculture, from 2006 to 2009. In 2006, they organized demonstrations attended by thousands of producers. The Chambers of Agriculture were in a strict position not to negotiate with the business groups. In 2009, however, they became inert and retreated from the producers.

Subsequent to the declaration being read, the chairman was applauded and the meeting was completed. With the chairman announced to the representatives from the districts and villages that they were to have flatbread, while the scarce crowd was leaving the square silently, they greeted the chairman and some were conveyed their

gratitude. Inviting the Chamber of Agriculture representatives from the villages, he instructed the chairmen of the districts, “Don’t break up, let’s have flatbread, let each member look after his own guests.” The chairman also paid for everyone. Afterward, he looked stressed out, but at the same time impassive. There was no trace of his aggressive or passionate attitude, as he had been in 2006.

One market actor, who was the exporters and ex-president of the Chamber of Commerce, emphasized in his market report the necessity of going beyond the ordinary [*ezberi bozmak*]. This attempt demonstrated the need in the market to argue the “indisputable knowledge” constructed in the market. In 2009, when the Hazelnut Strategy was initiated, the contentious relations between the institutions became blurred. In parallel with the changes in the market, the struggles and hostilities were replaced with compromises. Despite the impression that Fiskobirlik and the Chambers of Agriculture resisted the initiation of free-market principles, in their meetings with the exporters and importers in regional and international gatherings, they expressed a point of view that was closer to market principles. In 2004, for instance, the General Manager of one producer organization, during his speech at the INC (International Nut and Dried Fruit Foundation) Conference, said that “In our country where free market principles are applied; stable and long-term market prices will be formed with the principles of quality and commerce rules.” However, the compromise was not a harmonization of interest yet it was a new rhetorical device to symbolize the so-called harmony in the market. In fact, the compromise might be identified as inertia; being powerless to resist and to create rhetorical devices.

Conclusion

This chapter examines the rhetorical devices created by the formal institutions. This chapter aims to analyze the rhetorical devices of the hazelnut market construction in relation to the shift in power balances. More importantly, how the market groups create uncertainties during the social construction which results in the loss of power of these groups, which means they cannot intervene, control or overcome these uncertainties, are examined.

The tools of the social construction of these devices have been explained and exemplified in light of the market groups. Rhetorical devices are created through categorizing the contrasting groups as business and producer groups. The individual producers are excluded from the construction of the device, even though they become the agents of the execution of the devices, like in the 2006 protest in which thousands of individuals have participated. Rhetorical devices are also created through symbolizing (i.e., Fiskobirlik as a symbol of the producer groups, and C.Z. as a symbol of the exporter group); storytelling, emotions (i.e., hatred, hostility, and prejudice) as well as forecasting (i.e., possible actions against possible threats).

The power of the formal institutions in the creation of the rhetorical devices is identified as the ability to construct rhetorical devices, to create uncertainties and to control or intervene into these uncertainties. The power is also related to the ability to manipulate and to penetrate the flow of information through media. This chapter depicts how powerful these devices are to be adopted by each market actor. During each conversation with the market actor, the same rhetoric, arguments and strategies were used as if they were speaking from the same script. This proves how powerful

and solid the social construction of these devices is. The constant struggles and controversies in the local market have converged with the changes in the agricultural policies. In fact, this transformation has reconfigured the power dynamics.

During the preparation of the Hazelnut National Policy, the aim was to create the background for free market principles in order to create the required conditions for producers with the reconfiguration of the system by creating a hazelnut commodity exchange and the licensed warehouses. However, without creating these conditions, free market principles were enacted in 2009. Fiskobirlik and the Chambers of Agriculture opted to “discuss” with the business groups and to be “agreeable. “Even though the Chambers acted as if they were opposed to the Hazelnut Strategy, they only resisted the restriction of the production areas, rather than the initiation of free market principles. Their justification for the lack of their own resistance was based on the decision processes at the National Hazelnut Council, where the majority of the members were from the business group.

When I started the fieldwork in 2006, just after the 2006 protest, it was the most dramatic time of the market, with high tension. The rhetorical devices were harsh. These included local pressure against, for instance, *forward*. Some exporters did not reveal their forward contracts due to the negative connotation of the *alivreci* at the local market. More importantly, the exporters tended to disguise the forward contracts and did not even affirm the word forward. However, in 2009, the term was discussed through publications, reports, conferences, and meetings, using numbers and tables. The exporters started professing the necessity of forward.

The change in the interests of the market groups necessitates the analysis of the dynamics of socio-technical controversies. This chapter provides an overview on the

rhetorical devices and how they are constructed through categorizations, symbols, metaphors and how they stand on emotions, suspicions and threats. The next chapter will analyze the dynamics of the socio-technical controversies in relation to the constructed uncertainty and degrees of dialogism.

CHAPTER 7

THE MARKET AND CONSTRUCTED UNCERTAINTY

Hazelnuts have been an ongoing subject of discussion leading to long, sincere, loud and sometimes furious debates among the producers. It is inevitable in any group that a hazelnut-related topic is brought up for discussion. In the village coffeehouses, when I was trying to reach the producers, the chairs were immediately moved together, tea was ordered and the discussion began. Although the topics of these discussions mostly were shaped by the rhetorical devices created by the market groups, with the discussions in their everyday lives and the production conditions on the ground, the realities become apparent.

Therefore, two different spheres emerged, one was the everyday realities on the ground and the other was the rhetorical devices in the institutional sphere. This is the difference between facts and values, which are the knowledge produced by scientist and the arbitrary decision made by the politicians. The two spheres are derived from the weak degree of dialogism. The weak dialogism can be overcome with the elimination of the distinction between these spheres blurred to enable ordinary citizens to have their say and to break the monopoly of the specialist, representatives and politicians (Callon, et al. 2009).

When the Hazelnut Strategy proposed by the law that basically initiated the free market principles and restricted the production areas was enacted on July 15, 2009, many producers were not fully aware of its details. As for the ones who were aware, they acted as if they knew the details fully; they did not want to reveal that

they did not know. Many producers learned about the law and the relevant changes from me during the interviews. They reacted, saying, “Oh, won’t it [*the state*] purchase hazelnuts? So what will happen?” “It can’t be real!” Their traumatic reactions reflected not only the unknowns but also their inability to interfere into the unknowns and the lack of control over contingencies.

A high-school graduate expat who worked in the Netherlands cultivated his hazelnut orchard, 65 decares, along with a joint title deed shared with 4 family members. It belonged to his mother, who looked after the processing of the orchard. Since he lived abroad, he was not registered with the farmer registration system. He said that he waited every day for a price from the TGB to be announced during the news. However, as the law stipulated, the state would no longer make purchases or announce a price. He learned this from me and was astonished. He did not understand at first. When I explained it, he angrily said,

I won’t harvest! How? Impossible! ... Years ago, the price was given before the harvest. Don’t say it! I won’t give to [*the merchant*]! I have spent money, I have sweat blood, and I can’t give any more. The seasonal workers take hazelnuts for themselves.¹³⁴ I can’t make money from the product (Appendix, 28).

The reactions to the changes reflected how they had not expected what they did not know, and ambiguity on the ground. For the individual producers and for those who were not aware of the possible changes, as opposed to the market groups, the change had not been foreseen (Ondersteijn et. al., 2006). Luhmann (1991) writes that risk is not a description or a property of an objective reality; instead, risk is a particular mode of reasoning that names the boundary between the known and the unknown.

¹³⁴ They cannot afford the cost of seasonal workers and they have to give them hazelnuts instead of the cash money.

As “the unknown is socially constructed” (Kessler, 2007; Knorr-Cetina, 1999), the uncertainty concept is not solely analyzed in relation to the unknown. What Luhmann (1991) defines as risk, this chapter defines in relation to uncertainty. The difference is that the boundary is related to the interference of unknowns.

Local expressions such as “the hazelnut is circular, so it’s hard to understand” are related to the uncertainty perception that is created during the market process. Market developments contribute to displace uncertainty and/or to produce new forms of uncertainties (Martin, 2002). The local market makes and maintains uncertainty through ambiguity and complexity. It is analyzed through the price uncertainties, the ambiguous implementation of legal regulations that leads to complexities, and the dissociation of the individual producers from market processes.

Uncertainty has two implications in the hazelnut market, which also shapes its definition. On the one hand, uncertainty created by the market groups who can also interfere into unknowns through negotiations, bargaining, lobbying and the construction of rhetorical devices. This type of uncertainty is a power device to create and maintain the market. On the other hand, the individuals, mainly producers who cannot interfere into unknowns, experience uncertainty on the ground. During the periods to which the individuals cannot interfere, the market groups form the prices and policies.

The chapter conceptualizes how uncertainties are created on the ground and how the market is constituted by uncertainties, how the market groups interfere in unknowns, how uncertainties are perceived by the market agents on the ground. These factors were introduced in the previous chapters. This chapter is structured in four sections. The first section provides an analysis on the literature on the

uncertainty concept. The second section exemplifies how constructed uncertainties create the market. The entrance of the TGB to the market in 2006 is given to exemplify how unknowns create constructed uncertainty, chaos and complexity. The case of TGB provides an understanding of how uncertainty constitutes and maintains the market and vice versa.

The third section analyzes the constitution of the Hazelnut Strategy in 2009 to examine the asymmetry between specialist and non-specialist as well as between representatives and those they represent led to the weak and instable implementation of dialogism that make the individuals powerless in the face of uncertainties. The degree of dialogism is examined with a number of factors adopted from Callon et al. (2009). These are the intensity for composition of collective between specialist and non-specialist as well as between representatives and those they are represented; the diversity of groups involved; the quality of collaborations and discussions; the control of representativity of the spokespersons as the degree of the interdependence of the emergent groups *vis-à-vis* the established groups; the clarity in implementation; and the equality and transparency. This analysis reveals how the weak degree of dialogism produces destructive uncertainties.

The last section examines uncertainty on the ground and how uncertainty makes the producers – especially small producers – disabled to overcome uncertainties. Apart from the institutional setting, the individual producers overcome uncertainties with the strong land loyalty. The maintenance of the mechanisms becomes fragile if the producers' attachment to their lands is damaged.

The Concept of Uncertainty

The concept of uncertainty has been widely analyzed from a wide range of perspectives from classical economics to economic anthropology. In light of these perspectives, the concept has been related to expectations, risk calculation, unknowns and probabilities. This section summarizes these perspectives.

Uncertainty and Economic Equilibrium

The studies on uncertainty are varied in the economics literature (Perlman and McCann, 1996). In classical economics, Adam Smith referred to uncertainty in terms of the probability or improbability of success (Smith, 2000). Alfred Marshall related uncertainty to probabilistic risk and certain expectations (Marshall, 1920 [1961]). What the economists examined was the term “risk” based on mathematical formulism in econometrics (Reiss and Cartwright, 2004), financial calculations (Minsky, 1982), game theory (Neumann and Morgenstern, 1944), and the accountability of independent agencies (Schuberth, 2004), model and data uncertainty in relation to variables (Brainard, 1967; Levin, et al., 1999; Gerdesmeir, et al., 2002), goal uncertainty in terms of deviations from targets and objectives (Schuberth, 2004), the state-contingent approach to problems of consumer choice, and the theory of firm and principal-agent relationships that are contingent on a state of nature (Chambers and Quiggin, 2000).

The neo-classical approach describes uncertainty as dispersion or distortion from equilibrium (Van Daal and Jolink, 1993, p. 73-74). As such, uncertainty is

related to unexpected events, disturbances that turn into contingencies and risks. Therefore, these risks are taken as insecurity and instability within the market system (Keyder and Yenal, 2011). What the neo-classical account proposes to overcome these contingencies is a self-regulating system that eliminates and corrects these disturbances only into the long-term equilibrium (Marshall, 1920 [1961]; Harrison, et al., 2009).

As the neo-classical account undertakes the lack of mechanical equilibrium, even in the long-run in today's economies due to incomplete and imperfect markets as well as discrepancies between predictions and real outcomes, several approaches and theories have been proposed on market failure (Ashley, 2003), market concentration and power, externalities, ease of entry and exit (Krugman and Wells, 2006), property rights (Gravelle and Rees, 2004), transaction costs (Coase, 1937), the principal-agent problem, and contract theory (Chambers and Quiggin, 2000). These are the main concepts to be analyzed in terms of market imperfection. On the basis of these approaches, the lack of information, information asymmetries, efficiency and agency create uncertainty.

Lachmann (1986, p. 139) refers to the notion of subjectivism that entails reason and experience through which individuals form plans on the basis of their interpretation of events in a changing rather than chaotic world about which they have incomplete knowledge. Therefore, equilibrium cannot be attained for two reasons: the subjectivity of knowledge throughout the market processes and the subjectivity of expectations, which are based on changing knowledge. What distinguishes his theory is his approach to expectations, which are assumed to be created, rather than mechanically formed.

Regarding the reasons for uncertainty, Thünen (1966) stated that uncertainty arises as a result of a lack of ability on the part of the entrepreneur to account for each and every future contingency. Augustin Cournot (1990 [1843])¹³⁵ analyzed the sources of uncertainty not only as the individual's perception, which lacks certainty in clearly certain events, but also that specific events are clearly uncertain. Since subjectivism creates inconsistencies of decentralized and spontaneous decision-making units, the state is presented as a stabilizer and controller of uncertainty. As such, according to Keynes (1927), risk, uncertainty and ignorance are identified as the causes of the collapse of the laissez-faire system, which necessitates state intervention.

These approaches takes for granted the idea that economic processes consist of interconnecting “gambling activities” through which risk-taking behavior is inspired by “animal spirits” (Keynes, 1936, p. 161-162) and uncertainty becomes an inevitable and constitutive part of economic growth (Kaldor, 1963, p. 228). Therefore, the neo-classical economics approach and institutionalist approaches study the uncertainty concept in relation to how it can be controlled, managed and overcome through spontaneity, intuition, or through regulatory intervention.

Uncertainty as Risk?

In the literature of neo-classical economics and neo-institutionalism, the term “uncertainty” is studied through risk calculation (Humphrey and Verschoorb, 2004). The perspectives vary in terms of whether the risk is quantifiable or unquantifiable. Neo-classical economists largely believe in the difficulty of accounting for

¹³⁵ Quoted from Perlman and McCann (1996, p. 12).

uncertainty, which involves quantifiable characteristics. Rational institutionalists, on the other hand, analyze uncertainty in terms of a broader meaning, in relation to the foundations of policy-making in economics; however, they define the concept as unquantifiable risk, as opposed to quantifiable risk (Dow, 2004). Frank Knight (1921) originated the distinction between “quantifiable risks” and “unknown uncertainty” in economic decision-making by distinguishing risk from uncertainty.

He claimed that (p. 19-20):

Uncertainty must be taken in a sense radically distinct from the familiar notion of Risk, from which it has never been properly separated ... The essential fact is that ‘risk’ means in some cases a quantity susceptible of measurement, while at other times it is something distinctly not of this character, and there are far-reaching and crucial differences in the bearings of the phenomena depending on which of the two is really present and operating.... It will appear that a measurable uncertainty, or ‘risk’ proper, as we shall use the term, is so far different from an immeasurable one that it is not in effect an uncertainty at all.

As opposed to neo-classical economic assertions that risks can be analyzed through models, Knightian uncertainty models risk as identified and quantifiable uncertainty, yet, unquantifiable uncertainty cannot be modeled satisfactorily. Therefore, what is most relational about Knight’s unquantifiable uncertainty in the context of neo-classical economics is its focus on the absence of objective probability distribution. As such, Knightian uncertainty challenges the neo-classical premise on market efficiency in perfect conditions, the absence of false traders and the equilibrium price (Davidson, 2004).

Similarly, Keynes rejects neo-classicalism’s rational argument based on pure objective and logical treatment and refers to “uncertain knowledge” in relation to the dichotomy of “what is known for uncertain” and “what is only probable.” He

concludes, “There is no scientific basis on which to form any calculable probability whatever” (Keynes, 1937, quoted from Rousseas, 1992). Keynes defines uncertainty as an “unknown probability.” The degrees of uncertainty are taken as equivalent to degrees of probability (Keynes, 1921) in relation to risk calculation. However, this dissertation takes the *kinds* of uncertainty in relation to the creation of uncertainties.

The neo-classical approach claims that these risks might be controlled through mental processes and rational expectations.¹³⁶ At that point, the risk concept is divided into subjective values and objective realities (Bonatti, 1984). It is identified as a meaningful, factual and systematic process, as a reference to Pareto optimality. However, it is not analyzed rational decision-making as a problematic concept. In fact, to what extent does the rationality produce *reliable* information for market actors? How does it become reliable? As the power relations among actors or institutions constitute the market rational, the reliability is in question. Similarly, Hodgson (1985) criticizes the idea of rational itself while rejecting the notion of objective rationality.¹³⁷

In the contemporary discussion, uncertainty, in relation to risk perception, is identified as a part of economic activity and as a normal component of economic knowledge and in association with forecasting performance (Schmidt, 1996), risk, rational expectations (Lucas, 1981), or game theory (Neumann and Morgenstern, 1944). However, taking the ideal of economic science as a search for truth into

¹³⁶ The role of money is identified by Keynes as a bridge between the past and an unforeseen and uncertain future (Johnson, et al., 2000). Money provides time and information as well as honesty, confidence and optimism in expectations (Kaldor, 1963) for overcoming uncertainty.

¹³⁷ Boholm (2003) summarized that “the paradigm of cost-benefit analysis and rational choice theory, estimates and comparisons can be made to serve as guidelines for decision-makers” (p. 160). Studies that analyze risk through cultural aspirations rather than quantifiable or unquantifiable distinctions focus on the dichotomy between subjective risk and objective risk. “Subjective risk acknowledges that people’s beliefs and opinions often deviate from such scientific assessments” (p. 161). “Objective risk refers to phenomena and causality”, based on “measurable correlations and probabilities of harm, in the natural world that can have harmful effects” (p. 161).

consideration, some economists endorse the “social, interest-laden, situated and contextual” features of science (Mooslechner et al., 2004, p. 1).

These discussions relate the uncertainty concept to risk due to high risk perception, such as cheating (Kollock, 1994), insurance contracting and moral hazard (Commons, 1934; Heimer, 1985), asymmetrical information and social dilemma (Akerlof, 1970), bounded rationality (Commons, 1934, Simon, 1991), double-contingency (Coleman, 1990), non-cooperative bargaining and hold-up effects (Commons, 1934). Considering the undetermined processes of information producing, knowledge sharing and estimating, the prevalence of searching for accurate information has become significant. Therefore, the risk perspective regards the importance of using information and knowledge properly in order to overcome uncertainty.

Uncertainty: As Social Construction

Providing a variety of views in studying uncertainty, there is an extensive theoretical and empirical literature on the concept, yet the scholars essentially perpetuate the idea that uncertainty arises from both the nature of the real world and the limited ability to know it (Schuberth, 2004).¹³⁸ In other words, this assertion refers to the distinction between “uncertainty as a property of the real world, and uncertainty as a property of the knowledge about the real world” (Dow, 2004, p. 192). In that sense, the concept of uncertainty seems to characterize situations in which individuals cannot anticipate the outcome of their decisions (Beckert, 1996). Therefore, this

¹³⁸ Similarly, Richard Cantillon (1799 [1755]) argued that the respective entrepreneur for each of many trades and businesses had to commit known costs against unknown future prices.

dichotomy results in a situation whereby global and local are framed either as a system or as a diversity of situations based on the actions of the agents. Thus, the mainstream literature differs in terms of providing either a systemic or agent specific analyses.

However, in relation to the uncertainty concept, both neo-classical economists and neo-institutionalist take for granted the concept as a rational decision-making based on equilibrium models. Certainly, neo-institutionalist and post-Keynesian approaches put constant emphasis on how economic agents make rational decisions, how they form expectations as well as whether the institutional environment influences economic decisions or not (Minsky, 1996; Ferrari and Conceição, 2005). Therefore, in a world of incomplete and imperfect information, institutions are necessary to force economic agents, with limited insights, to adopt strategies characterized by conventions (Ferrari and Conceição, 2005). Callon, et al. (2009) emphasizes deep and productive uncertainty that emerge through socio-technical controversies that include laypersons, non-specialists and ordinary citizens to deepen and enrich delegative and dialogic democracies. These definitions given within the framework of neo-classical market rational and discussions on equilibrium, consider the social constraint in determining and overcoming uncertainty.

The social construction of uncertainty has been analyzed in a variety of studies. Uncertainty is also identified as a social factor that let the actors form commitments (Kollock 1994; Yamagishi et al., 1998; Cook and Emerson 1984; Molm, 2000). Akerlof (1970) identifies uncertainty as the lack of ability to detect correctly the seller's intention and the possibility for the seller to profit from acting dishonestly. Similar to this perspective, organizational theory and network theories assume that

on-going buying-selling relations constitute a control principle through social uncertainty (Kollock, 1994).¹³⁹

Although the studies on uncertainty identify power inequality (Cook, et al., 2002) and direct or indirect on-going relationships (DiMaggio and Louch, 1998), these studies provide a formalist perspective according to which the rational estimations of unknowns are based on accurate numbers, statistics and forecasts. Also, these studies do not consider how unknowns are constructed.

Further, the neo-institutional approach examines uncertainty as externalities, and as efficiency (North, 1990) that tends to substantiate in every exchange (Schmid, 1987). The analysis, which identifies uncertainty as a transaction cost, delimits the concept to efficiency and economic growth to be achieved through rational institutions and the rational activities of rational individuals (Williamson, 1975). However, all of these activities embrace an ongoing struggle to search for or to manipulate unknowns.

As O'Barr and Conley (1992) state, the greater the uncertainty, the less it is possible to be a rational and calculating market actor. Therefore, uncertainty is a function of the length of time between making a decision and being able to assess its outcome. The process of calculating within uncertainty includes complex social dynamics including the material realities of the product concerned as well as the social and political processes of pricing. Similarly, Granovetter (1985) refer to the process of uncertainty during which actors try to build and rely on stable relationships rather than to meet each situation anew with fresh calculations.

¹³⁹ Also, the organizational theory identifies uncertainty with reference to, on the one hand, firm-to-firm transactions and performance (Coleman, 1990; Shelanski and Klein, 1995), organizational trust (Zucker, 1986), transaction frequency (Williamson, 1981), private-treaty transactions and value uncertainty (Smith, 1990); and on the other hand, product quality (Kollock, 1994).

Uncertainty: constitutive of the market

Callon et al. (2009, p. 119) identify two spheres of uncertainty, which are uncertainties “concerning our knowledge of the world” and uncertainties “affecting the composition of *a* collective” [*emphasis added*]. These concepts are adopted in the dissertation. First, the uncertainty in relation to the knowledge of the world is related to the asymmetry between specialist and ordinary citizens in terms of unknowns and the creation of unknowns. This is indisputable knowledge created by the market groups and maintained by the informal institutions. Second, the composition of a collective is related to the elimination of asymmetry among market groups and between market actors in the creation of a collective, which is the collaboration between specialist and non-specialist as well as between representatives and those they represent in the market.

Weak procedures of dialogism delimit the composition of a collective. Such a collective is reduced to the aggregation of individual wills, which are supposed to be perfectly conscious of themselves (Callon, et al. 2009, p. 130). They shape uncertainty through market groups and produces rhetorical devices to support its identities and to enrich its power.

There are numerous unknowns in the market. While environmental uncertainty is an objective uncertainty, the estimations and prospecting on the environmental conditions generate constructed uncertainty, such as crop estimation, bargaining between importers and exporters, speculation, forward contracts, and prices. The market actors are in uncertainty while making the market prices, waiting for the government decisions and the announcement of the purchase price, or looking for

information about a spot price.

Therefore, the dissertation identifies the uncertainty concept in relation to two types of unknowns. In the first type, the market groups create uncertainty during the processes, or length of time, of market and policymaking. These are the processes where unknowns dominate and the politics of uncertainties maintain these processes of market and policy making. The market groups can infer unknowns. It is the power that gives these groups the ability to be able to interfere in these unknowns. In the second type, the producers on the ground lack the capability for diagnosis due to unknowns and constructed uncertainties. They are also excluded from the constant interaction with the specialists and representatives. They experience ambiguities due to the uncertainties of unknowns and do not have the ability to interfere into unknowns.

Therefore, the uncertainty concept is not derived solely from unknowns. Also, the concept is not just “we know that we do not know but that is almost all that we know” (Callon, et al. 2009, p. 21). Instead, uncertainty is when someone cannot interfere in the unknowns. In the case of the first type, for instance, this is the inability of one market actor to interfere into the actions of another market actor. In the case of the second type, it is the lack of power to interfere in price making or policy negotiations. The power is the “capacity for diagnosis, the interpretation of the facts, and the range of solutions” (p. 33). However, to be able for the producers to execute this power, there should be the collaboration between the individual producers, specialist and representatives.

Within this framework, it is aimed to create an understanding on the limitations of double delegation and weak dialogism. As such, formal institutions have the

power to produce rhetorical devices that create destructive uncertainties. What the chapter analyzes is how the weak degrees of dialogism excluding non-specialist and producers create destructive uncertainties.

The Market Constituted by Uncertainty

In the market, a profound impression of market actors on the concept of uncertainty was observed, in relation to amount of crop, prices, state policies and actions, behavior of sellers and buyers and institutions, debts, and time frames. This section explains the uncertainties in prices and how the market is constituted by constructed uncertainties.

The concept of uncertainty is not only a risk calculation, but also processes of market formation. The market risks are identified as uncertainties that cannot be controlled through the market processes in which market actors, intentionally and unintentionally, create uncertainties. Pricing is based on uncertain processes that are constituted by speculations, misinformation, political dynamics, local knowledge and networks, rather than on a one-shot point of reference to supply-demand balance (Alexander, 1992; Dilley, 1992; Çalışkan, 2010).

In the making of market prices, a particular market operates that might be called a market constituted by uncertainty. As observed by MacKenzie (2006, p. 22), “difficulties remain” in pursuit of spot prices “even if one restricts oneself to the price at which transactions are actually concluded.” Small producers have to sell their products to merchants and grocers at the spot price. If spot or support purchase prices become close to or higher than forward prices, the exporters may manipulate

spot prices. In that vein, uncertainty is materialized in the expectation, formation, estimation and maintenance of the market prices.

Providing a more substantial account of uncertainty, the prices are highly sensitive to the supply of hazelnuts, and thus present particular challenges in relation to uncertainty. In that sense, uncertainty is characterized by the fluctuation of the price in the market not only in terms of loss or gain as a risk perception, but rather a more integrative approach to probe its nature. The market actors recognize and anticipate the seasonal variations that are associated with political impacts, manipulations, speculations and the effects of environmental variations. However, they are less able to predict the daily spot prices for hazelnut unless they have the ability to interfere in the areas of information processing and also are involved or familiar with the decision-making process and networks of pricing. In light of this type of constructed uncertainty during the crop season, a particular market operates on the ground that might be called a market constituted by uncertainty, in which not only is uncertainty constituted, but also the market is constituted by uncertainty.

Following the decision of an inter-ministerial committee chaired by the Prime Minister, on August 28, 2006, the procurement of hazelnuts was assigned to the TGB. In 2006, a new participant emerged in the hazelnut market. From 2006 to 2009, the TGB purchased hazelnuts on behalf of the state. The inclusion of the TGB generated uncertainties in terms of such variables as purchase policy, pricing, the lack of expertise of the TGB in hazelnuts, and the relations among the exporters and crackers,¹⁴⁰ Since the TGB is only specialized in cereal, grain and corn, hazelnuts

¹⁴⁰ The bidding of the TGB has always created contesting power areas in which it is identified with the struggle of powerful actors to adjust the price at their desired level. Just before the season opening in 2010, for instance, the TGB declared a bid on hazelnuts in its stock and many exporters purchased some amount of product even though some of it was old. Therefore, the power of the market agents is

was an unknown product that created complexities in the marketplace. This section investigates the changes as unknowns with the new and different regulations of the TGB, after Fiskobirlik, and how the market is constituted by uncertainties through the gradual purchase and price policies of TGB.

The TGB was a new actor in the hazelnut market with a lack of knowledge and experience in the product. On the side on the producers, the TGB was also an unknown because its purchase policy differed from that of Fiskobirlik. TGB employees were assigned to follow a technical specification and instruction form closely. This is very unusual in the hazelnut market, where hazelnut purchasing is made in irregular ways. The buyer takes a handful of hazelnuts, looks at it and sets the yield level randomly.

With the guidance of the technical specifications, most of the hazelnuts were rejected by the TGB. As the producers were rejected, some of them returned home with their crop to prepare it in accordance with the specifications. Some of them gave their hazelnuts to merchants. The TGB purchase policy had three implications.

First, the technical specifications were different from the previously known specifications.¹⁴¹ For example, the humidity standard was determined to be 6 percent in the specifications where it had been 6.5 percent in the previous years. The producers were used to marketing hazelnuts with a humidity rate of 6.5 percent. The producers who brought their hazelnuts back to their home tried to dry them to decrease the humidity rate. These producers talked about how difficult it was to dry tons of hazelnuts at home using heaters and stoves.

somewhat limited in relation to one another, which makes the economization process more contested and contradictory.

¹⁴¹ Although TGB employees received training about hazelnuts before the first purchase, the personnel changes and training schedules did not complement each other in an orderly manner.

As the decrease in humidity meant a decrease in weight, the 0.5 percent difference in the humidity requirement resulted in a loss of 1 kg per every 100 kg. The decrease in a loss of kg directly leads to the decrease in prices of hazelnuts. Furthermore, TGB employees who saw brown at the core of a hazelnut kernel rejected it as rotten. In fact, this is a characteristic found in 25 percent of hazelnuts. This situation was interpreted as the skeptical approach of the TGB officers to every detail, due to their lack of acquaintance with the product.

Second, due to the troubles of the producers with the technical specifications of the TGB, many of them had to give their hazelnuts to merchants. In 2006, even the producers who had fulfilled the minimum technical requirements had to give their products to merchants, due to the late date of appointment. Since they were in need of cash and did not have the storage capacity, the producer could not wait for the date of appointment. When the producers gave their hazelnuts to the merchants, the merchants have mixed low and high quality hazelnuts to reach the purchase criteria. With producer's certificates, some of the merchants gave these products to the TGB.

When the producer was gave both his certificate and product to a merchant, the price would be for instance 3 TL. When they gave only the product, the price would be 2.8 TL. Therefore, the merchants earn double both from the purchase of the producer's products at lower prices and from their sale to the TGB at higher prices.¹⁴²

One producer described his experience as follows: "I brought my hazelnut to the TGB last year. They said, dry it, clean it and bring it back on a date they specified, then I decided not to give the hazelnut to TGB, and give it to merchant. The merchant mixed the hazelnut in order to increase the yield, and sold it to the

¹⁴² When the spot price was set as TL 2.5, the purchase price of the TGB was TL 5.00.

TGB.” Another producer said that the measurement of yield was lower than the expected, which led to decreasing revenue for the producers as follows: “It is impossible to recruit seasonal workers, the last year came with its cost [*cost of seasonal workers*], to sell to TGB, the yield decreased to 42.1 at TGB even though the yield was measured as 44.4 at Oltan, and you should know how Oltan chooses [*very carefully*].” However, one producer said, “Everybody [*merchants and intermediaries*] made revenue from the TGB, including X (an exporter). It is not the fault of the TGB employee; it is the fault of those who prepared the purchase specifications.”

Third, the TGB’s new policy led to a struggle between with the producers. While one producer commented that, “Fiskobirlik was the cooperative of the citizen, it was protecting the citizen,” another producer described its discriminatory approaches. This divergence pointed to two different opinions. There were those who contemplated the continuance of the state guarantee in the marketplace since the TGB was a state institution. Also, there were those who considered the TGB as an unknown actor, as compared to Fiskobirlik.

In light of these implications, the changing purchase specifications resulted in uncertainty in the marketplace. The unusual and unexpected technical scrutiny compelled the producers to give their hazelnuts to the merchants at lower prices. The change in the market was also related to the struggle between the producer and the new comer, TGB, which was due to the unknowns.

The purchase and price policies of the TGB were envisaged to ensure that the TGB purchases did not disturb the market. Priority was given to the spot market to be formed and the market was created before the TGB started purchasing. This was

based on the idea that the merchants and exporters had acquired the necessary amount of hazelnut supply at the spot prices. When the exchange was completed and when the price was formed, the market was created. The TGB's purchase policy was based on the submission on the date of appointment, and the purchase as conducted gradually based on the four-month period. As a result, the spot price was formed on the basis of the uncertainty on the ground through the interference in the unknowns.

On the producer's side, individual producers had to obtain an appointment on the TGB website. The appointment system created chaos for the producers, who were used to delivering their product immediately without an appointment to Fiskobirlik. The chaos of the purchase policy was generated due to the fact that the system gave the appointments far in advance. In 2006, the first year of the TGB, it took eight months for a producer to get an appointment for sales. Although the system had started to give out appointment in earlier months, the buying-selling relations in the marketplace changed with the appointment system, which prevented the immediate exchange. Therefore, the producers were unable to submit their hazelnuts immediately to the TGB. They had to give them to the merchants at lower prices as they were in a need of immediate cash, or in a position to give their hazelnuts before returning the cities in which they lived.

Only the producers who possessed a farmer's registry document were allowed to give their hazelnuts to the TGB. Since land registry is a major problem in the region, the sharer or the user of the land may not possess the title deed. Therefore, most of the producers had to give their products to merchants at lower price than the purchase price.

Between 2006 and 2009, during the period of the TGB's purchases, the support

purchase prices were determined by the state. The support prices were higher than the spot prices. The announcement of the purchase prices has been very important for the producers and they waited impatiently for the producers. Each year, the prices were declared on different dates. From 2006 to 2009, as the TGB announced the purchase prices late, the market actors experienced deep uncertainty. The producers were used to knowing the purchase prices in mid-August with an immediate exchange without appointment. In 2006, the purchase prices were declared in the first week of September and the purchases were started as of September 10. In 2007, the purchase prices were announced on July 9, with purchasing to be started in August. The general elections were to be held on July 22 were significant in relation to the early announcement of the purchase prices.

In 2008, the harvest started early due to the abundance of crop. However, the TGB declared the prices at the end of August with purchasing to begin in September on the basis of the appointment system. After the completion of harvesting, the producers had to bring their hazelnuts to the marketplace due to such realities as their lack of storage capacities, their need of cash (i.e., their debt to merchants, Ramadan, and the start of school). Therefore, although the purchase prices had not been set yet, the spot prices had already been formed and the producers had started giving their hazelnuts to the merchants at the spot prices. The market had already been constituted by uncertainty in the two weeks of time between making a decision (i.e., purchase prices) and being able to assess its outcome (i.e., spot prices).

During the period of three years, the producers grew used to the purchase criteria and planned to prepare their hazelnuts in conformity with these criteria. In 2009, before the announcement of the Hazelnut Strategy, one producer explained his

estimations based on the historic prices and his personal experiences as follows:

In the past, I never left my hazelnuts for emanet because of Fiskobirlik and also, for the last three years, because of the TGB. We used to get a date from the TGB; we would store the hazelnuts at home for 1-2 months. Last year our harvest was 5mt, this year we have only 1.5mt of hazelnuts, and we will store it in our houses and then sell it. The purchase price will be 4.5 TL [*estimation*] this year and 5.0 TL [*estimation*] next year. The price will not be lower than the previous year. The TGB must absolutely announce the price. Otherwise, it will be difficult in terms of the production costs. The salaries of seasonal workers have been announced as 23 TL per diem, but nobody can get anyone to work for less than 35 TL (Appendix, 29).

With the Hazelnut Strategy, the TGB purchases were stopped. Before the announcement of the decision, the producers were still expecting that TGB would purchase for the year 2009.¹⁴³ The measured action of the government that assigned TGB to purchase hazelnut in 2006 was shifted to the clear-cut decisions at the end of contentious socio-technical controversies in 2009. Since the producers were not informed that the government decision was a measured action that was taken in uncertainty, they experienced uncertainty after the initiation of the Hazelnut Strategy. The following section will analyze the dynamics of the socio-technical controversies of the Strategy.

¹⁴³ The inclusion of the TGB in the hazelnut support purchases on behalf of the state also had implications in terms of state finance. The producers compared the duty losses of the TGB and those of Fiskobirlik. They said that if Fiskobirlik had been supported to recover its financial difficulties during 2006-2009 in exchange for the duty losses of the TGB, Fiskobirlik would still have been alive and active in the market. However, as a result of Law No. 4572 initiated in 2000, Fiskobirlik had become a financially autonomous institution to which the state could provide finance for support purchases.

The Degree of Dialogism: *The 2009 Hazelnut Strategy*

The degree of dialogism is identified by Callon et al. (2009, p. 160) to “facilitate the double exploration of possible worlds and identities, and of the collective to a greater extent”. A set of criteria is defined that correspond to strong or high values of the different criteria of the degree of dialogism. The construction of the Hazelnut Strategy will be analyzed in relation to the degree of dialogism. This analysis examines the weak mechanisms of the procedures and implementation of dialogism that delimit to create a collective. Although in 2005, the problem areas were defined to create a collective, from 2005 to 2009, the socio-technical controversies of the market making process could not continue a collective. This section analyzes the dynamics of the failure to create the market as a collective as a reference to the criteria of the degree of dialogism.

The construction of the Hazelnut Strategy initiated on July 15, 2009 included the contentious socio-technical controversies. The analysis on these controversies features the uncertainty concept as the inability of the individual producers to interfere uncertainties. The law initiated four changes. The uncertainties during the period of the publication of the law (on July 15th) and the publication of the regulation (August 26th) make the market actors (both producers and policy executers) disabled individuals. With the Law, three changes have been enacted. First, the hazelnut production was prohibited in the areas with the altitude of 750 and higher, and in the areas with the slope below 6 percent. Second, the support purchases of TGB stopped and the free market conditions were initiated. Third, the producers, who have the hazelnut farmer’s certificate, would be provided support

payments to be paid for three years between 2010 and 2012.

The Degree of Intensity for Composition of Collective

The degree of intensity is measured with the extent to which non-specialist involved in the identification of the problems and they concern for the composition of a collective. The intensity thus signifies the collaboration between specialist and non-specialist as well as between representatives and those they represent (Callon, et al. 2009, p. 158). The creation of a collective is based on the continuously emerging identities with never completed work of composition of a collective. A collective is not the aggregation of individual wills. Also, it is not the general will, which is shaped by the will of the strongest. Instead, a collective includes the expression on emergent identities; the mutual consideration of identities; and the negotiation and articulation of identities (p. 133).

On October 10-14, 2004, in Giresun, the Third National Hazelnut Conference was organized by Fiskobirlik, the Chambers of Trade, and the Commodity Exchanges, the Chambers of Agriculture, the Chambers of Engineers, the Hazelnut Research Institute and NGOs, with the wide range of participation by the market groups. With the leadership of the governorship of Giresun, the participants included the Exporters Union, 70 NGOS, 9 political parties, 20 media representatives, 8 state institutions and 3 faculties. The two main ideas of the conference were to emphasize the necessity to contribute to the development of the market with scientific and well-attended events as well as the inclusion of “cooperation, compromise and negotiation between the producer and trade groups rather than competition and conflict”

(Conference Proceedings, 2006).

Papers were presented in three commissions in the categories of the economy, production, and Health, Nutrition and Others. This conference constituted the basis of the National Hazelnut Policy with the determination of the member of the Hazelnut Arbitration Council in order to work on the regulation and the implementation of the decisions that were taken at the Conference and that will be taken after the Conference with the coordination of the public institutions and universities.¹⁴⁴

On September 6-7, 2005, the Hazelnut Arbitration Council gathered with the participation of business groups, producer groups, academics and political circles. Through several working committees, the following problems were identified at the end of the fact-finding conferences: imbalance in production and consumption; price instability with the following problem areas; production, marketing, export, legislations and regulations; promotion, technical infrastructure, R&D; finance; and political interaction, competition, and industry. Following the Council gathering, the parties agreed on the creation of the National Hazelnut Council.

More importantly, the project document included a methodology of a “rational framework” that was defined as a systematic regulation of the opinions of each group during policy making in a clear and standardized manner to be able to control and implement the project phases. Therefore, the aim of the project was “to ensure the consumption of hazelnuts through a customer-oriented marketing approach by considering the wealth of the partners with a sustainable balance of production-

¹⁴⁴ There had been other attempts (i.e., the Hazelnut Coordination Council, and the Hazelnut Monitoring and Appraisal Committee of the Hazelnut Promotion Group) to create a council on the hazelnut. In fact, these attempts failed to end the power struggle between the market agents. This also created conflicts among the exporters. Beside the resistance to the changes in power balance, the reason for the conflict was also the lack of a common ground and the lack of a wide range of participation in these councils.

consumption under the conditions of the free market principles.” Following the determination of the aim, the working groups identified at the National Hazelnut Council in 2005 were identified in five intervention and problem areas: Production, Export, Political Documents and Regulations, Marketing and Promotion, and Technical Infrastructure and R&D.

On September 06, 2005, the market groups conducted a series of the hazelnut working groups to define the problem areas in the market. The representatives of business and producer groups involved these workshops, which included exporters, representatives of the institutions and specialists. Although each group reflected their own interests and identities, the proposed requirements reflected the interests of a collective. Through collective experimentations in the socio-technical controversies between the market groups, the communication becomes for getting to know each other and to internalizing the change through *collective learning* (Callon et al., 2009). The Conclusion Report of the National Hazelnut Council working groups determined the problem areas (Table 15).

Table 15: The Problem Areas of the Hazelnut Market

<p>The Requirement:</p> <ul style="list-style-type: none">- To rejuvenate hazelnut trees to prevent quality losses- To complete the certification of hazelnut gardens- To increase product diversity in the East Black sea region- To improve production techniques- To develop organic agriculture and good agricultural practices- To create regional hazelnut warehouses to regulate hazelnut supply, to ensure price

stability, to protect the producers, to prevent biological pollution and to protect public health

- To create the National Hazelnut Council
- To encourage R&D
- To support the producers who produce hazelnuts in permissible areas
- To determine the hazelnut production areas through remote satellite systems and geographical information systems
- To create a transparent database should be created that includes production areas, production amount, market, price, export and stocks
- To create a joint committee to conduct crop and cost calculations
- To ensure the active role of Fiskobirlik as a producer organization in the farmer registry and support applications
- To develop sectoral support instruments to increase the export of processing products and to enrich market oriented production and product diversity
- To create a determined and constant national hazelnut policy with the participation of each constitutive sphere of hazelnut sector including producers, merchants, industrialists, exporters and consumers
- To strengthen the activities of Hazelnut Promotion Group through promotional and market extension actions (in Fareast Asia, Scandinavia, South America and Africa)
- To participate the participation to international food fairs for national and international lobbying, information and promotional activities
- To create hazelnut commodity exchange to create with exchange halls, electronic stock certificate, e-trade, forward transactions and licensed warehouses
- To develop the branding activities on processed products made of Turkish

hazelnuts

- To ensure the participation of hazelnut related enterprises and institutions into Codex Alimentarius Commission
- To establish a World Hazelnut Export and Cultural Complex in the East Black Sea Region

Source: The Conclusion Report of the National Hazelnut Council Working Groups, September 2005.

Each institution is authorized by some individuals or a group of individuals who represent a variety and a diverse set of aggregated interests of a given group of individuals. The institutions do represent the aggregated interests of individual, rather than the composition of a collective where “singularities are asserted” (Callon, et al. 2009, p. 133). For instance, there are a number of institutions that represent the business groups; yet, each is powered by independent groups or individuals; hence, they have different perspectives, actions, lobbying channels and the sphere of influence. Individuals also may represent more than one institution, which proves their extended sphere of influence.

At the end of the Report, it was mentioned, “Above all, the most important is to create National Hazelnut Policy that does not imply any political concern”. This proved that the market groups also identified the obstacles in creating a collective. None of the above proposed requirements could be assigned as a specific interest of either a producer or business group. These were defined as collective interests of the market groups. However, many of them were not realized. The reasons of this failure were based on the 2006 protest and its socio-technical controversies, which were

analyzed in the previous chapter. The identification of the requirements of a collective did not result in its implementation.

The Weak Degree of Diversity

The degree of diversity is identified as *openness*, which signifies the extent to which new groups and individuals involve in the socio-technical controversies (Callon et al., 2009). In 2006, the Law on Agriculture was launched with to introduce the principles and priorities of agricultural policies that would guarantee harmonization through international commitments. This aimed to include a so-called holistic approach in agricultural production and development. As such, it includes support instruments that ensure the prevention of any market distortions and the development of producer's organizations. Also, the Law insists on the increasing significance of the private sector, and the active involvement of producers in the market activities. A holistic approach included the involvement of the members of which would be the state, farmers, the private sector, civil society organizations (such as agricultural cooperatives, unions, foundations, and voluntary organizations). Again, the Law focuses on sustainability, human health, environmental responsibility, decentralization, participation, transparency and accountability. These are the governance procedures initiated by the Law on Agriculture in 2006.

In July 2007, the National Hazelnut Council was based on the Law on Agriculture No. 5488 and within its framework of commodity councils. The National Hazelnut Policy was prepared by a formal committee (as a reference to the Law on Agriculture) composed of the Ministry of Agriculture, the Ministry of Finance, the

Ministry of Industry and Trade, the Ministry of Forestry and Environment, the Undersecretaries of State Planning Institute, and the Treasury and Foreign Trade, and the TGB. Therefore, one might say that the decision-making committee was the full of state organizations. Only, the technical knowledge was acquired by the independent experts, the agricultural engineers, the Chambers of Agriculture and the National Hazelnut Council.

The dialogism needs to deepen through the degree of the independence of the new groups and individuals as compared to the established action groups. Despite the fact that, as a reference to the Law on Agriculture, non-state organizations and producers also were involved in this process, they were incorporated into the system only in terms of education, consulting, research, publication or educational materials. The responsibility of civil society organizations (such as product councils, producer organizations) was delimited to technical duty, coordination and partnership with decision-making bodies. Therefore, the National Hazelnut Policy lacked the proper implementation of the Law on Agriculture that proposed a holistic approach. This lack points out the discussion on quality and continuity of collaborations and discussions.

The Weak Degrees of Quality of Collaborations and Discussions

The degrees of quality refer to the intensity and continuity of voice of new identities. This is related to the continuous interaction and encounter between the groups and the continuous involvement of new groups and identities. The degree of seriousness signifies the relevance of the arguments and objections (Callon et al., 2009). The

National Hazelnut Council constituted the socio-technical controversy where the market groups encounter to create the National Hazelnut Policy. The National Hazelnut Council was to create sustainable policies to be able to create mutual and common benefits for all parties including producers, exporters and local people. The original idea was to remove temporary solutions to be generated just before the each crop season. Therefore, the necessity to create a National Hazelnut Policy was emphasized by the National Hazelnut Council.

However, the identification of the problem areas was shaped by the dominant groups, who were business groups. On 3-4 November, 2007, fact-finding conferences were organized as activities of the Undersecretariat of the Prime Ministry for Foreign Trade with the Hazelnut Promotion Group within the framework of the Hazelnut Action Plan and the creation of the National Hazelnut Policy. The Hazelnut Promotion Group organized several fact-finding conferences in Abant, Bolu, inviting the groups directly and indirectly related to hazelnuts including those in the public and private sectors with the aim to create sustainable solutions for structural problems as well as to create the National Hazelnut Policy until mid-2008. The methodology of the policy-making process was determined as a “holistic approach” with the participation of a wide network. The participants of the conference included the representatives of the state, producer groups, business groups and academics.

This points out to a change of the market construction from conflict to compromise.¹⁴⁵ However, this resulted in a change in rhetorical devices and a shift in the power balance from the business groups to the producer groups. Through this

¹⁴⁵ In 2009, when the free market principles were initiated, the heads of Fiskobirlik and the Chambers of Agriculture told me that “the producer organizations had to decide to be compatible with the business groups.” The reasons of this attitude were explained in the previous chapter.

change, new rhetorical devices were constructed on the concept of compromise. In fact, the compromise was nothing more than the shift of power from one group to the other. Therefore, compromise, as the symbolic tool of the rhetorical device, was constructed by the business groups.

After 2006, the power balance among the institutions shifted toward the business groups. During the preparation of the Hazelnut Strategy document, the Hazelnut Promotion Group organized fact-finding conferences in a holiday village, inviting the heads of each institution, journalists and academics with their families. The finance of these activities was supported by the promotion budget of the Hazelnut Promotion Group.¹⁴⁶ In fact, since the budget was supported by the fixed amount of each transaction of the exporters, some exporters also questioned the use of this budget.

During the period between 2006 and 2009, each institution produced numerous reports and press releases. In the meantime, regular meetings also were conducted with the state representatives, despite the Hazelnut Committee that has been assigned to prepare the Hazelnut Strategy, each group also conducted informal meetings with the decision makers (i.e., politicians, state representatives) in order to express their opinions and create their lobbying power for their interests. The change in the definition of collective problem areas was also derived from the state approach. In one meeting between the National Hazelnut Council and the Minister of Agriculture and Forestry on February 20-21, 2008, according to the meetings minutes, the Minister of Agriculture emphasized that:

¹⁴⁶ The promotion budget of the Hazelnut Promotion Group is financed by a small percentage retrieved from the exporters.

The National Hazelnut Council can carry out the functions like any other commodity council in the world. You have to approach it with the objective criteria of whom you are presenting. There would be nothing if you act like a musketeer. At the [2006] protests and demonstrations, it is high treason to ravage and to give arbitrary prices with a populist approach ... our chair is not the place to demand. Those who come to us should bring their solutions and suggestions ... We do not expect anything from you, read the first article of the regulation on the National Hazelnut Council and embrace your duties. We did not assign you. You do not depend on the state apparatus. You have to produce active policies. In the near future, those who have felt or assumed themselves to be dependent on the state have confronted the state. They have tried to get out of something from the state with a cooperative mentality left from the 60s, but, nobody has benefited from these actions, neither the producers nor the merchants nor the state ... The role of this Council is to see the next 15 years and to take the necessary precautions against these conditions ... You will say that ‘we, as the National Hazelnut Council, will foresee such things’ and we, as the state, will implement them under the regulatory framework ... The era of ideologies and the mentality that ‘the state will give us’ has ended ... Come together and create a consensus among the Council, and submit your report till March 15 [2008].¹⁴⁷

Beside the state, the media became the tool to enforce the interests of the established group. During the summer 2009, I met some journalists who said that they had been offered bribes in exchange for not commenting on anything against the new regulation on the hazelnut that was initiated in 2009 with the free market principles.¹⁴⁸ Each group publicized its arguments through the channels that either belonged to them or supported them. Just two days before the announcement of the Hazelnut Strategy, in both the national and local media, a full-page announcement publicized by the Hazelnut Promotion Group and the Turkey Exporters Council in the national and international newspapers. The announcement, with the big logos of

¹⁴⁷ The date scheduled by the Minister was around that which had been targeted for the completion of the Hazelnut Strategy Document at the fact-finding conference in 2007.

¹⁴⁸ A young journalist among them told the woman journalist to “tell me,” showing the mentioned and when the woman journalist turned to me and said “they bound us to this” [*bize bağlama yaptılar*], which meant binding them with bribery. Subsequent to the enactment of the new hazelnut law bribes were offered to some journalists in order for them not to write in the local and national newspapers any opinions criticizing the law’s provisions. She said that one organization among the business groups had proposed TL 5,000, but later called and said: “we said TL 5,000, but how about TL 3,000?”

the Hazelnut Promotion Group and Turkey Exporters Council, may be translated as follows:

It is time to win for Turkey. In the hazelnut, neither state, nor exporter, nor producer, nor consumer, nobody is satisfied, nobody. They do not win. We planted the hazelnuts on the flat plains with our own money. We have not left any space for alternative products, we lost a lot and we lost diversity. We not only produced more than the world demand, but also have encouraged competitor countries. It is possible to have a system that supports the producers and lets the consumers and Turkey to win. Now then! Let's do it! For your health, eat a handful of hazelnuts each day (Appendix, 30).

Every party involved in both technical and decisional processes agreed on the changes concerned in the National Hazelnut Policy. The Chambers of Agriculture and Fiskobirlik, which were considered strong opponents to free market principles, also accepted the technical report presented at the Governing Body of the National Hazelnut Council. The board of the National Hazelnut Council was composed of representatives of business and producer groups. However, business groups constituted the majority of the board. Again, controversially, the decision-making body of the National Hazelnut Council consulted with the technical committees in the preparation of the technical report of the National Hazelnut Policy.

The creation of the National Hazelnut Policy resulted in the initiation of the Hazelnut Strategy. From 2007 to 2009, the content of the policy document was revised several times. In 2007, during the time of the preparation of the document, it was proposed that free market principles should be included after the solution of the problems of excess supply, the creation of licensed warehouses and commodity exchange systems, the control of the crop level and the production areas, providing the support of the producers organizations, the revision of Heritage Law, and the

revision of the Law on forestry areas. However, in 2009, a law relating to the Hazelnut Strategy was initiated the clear-cut decisions by initiating free market principles with the removal of regulatory agency, the restriction on the TGB in selling any hazelnuts to the market from August to January; also, the restriction of the production areas.

The Weak Degree of Interdependence between the Groups

The control of representativity of the spokespersons is related to the continuous involvement of the emergent groups and minorities and the redefinition of the identities of the individuals and groups involved in the controversies. However, the change in the interests is the result of the monopolized discussion of the established groups (i.e., business groups) that exclude the identities of minority groups (i.e., producer groups and individual producers). The analysis on the degree of the control of representativity provided an understanding on how the weak control of representativity was related to the significance of the interests of individual producers.

More importantly, the weak representativity was the expression and consideration of the interests of these groups after the research and decisions were taken. These groups were not considered during the process of decision making. Callon, et al. (2009) identifies this situation as follows: "... minority or dissident hypotheses outside of the existing frameworks should be expressed and considered when the investigations and research are decided on, and not afterwards" (p. 216). For instance, the National Hazelnut Council generated a press release following the

declaration of the Strategy by stating that the area support payments should be paid during the months of August and September in 2009 as well as the allowance of the public banks for a low cost harvest credit in exchange for these payments. However, these discussions were conducted after the initiation of the Strategy. This section exemplifies the representativity of the producer groups that negotiate the clear-cut decisions after the initiation, even though these groups were included in the construction of these decisions.

During the discussion of the Hazelnut Strategy, the producer groups emphasized the possible problems in implementation of the Strategy. They focused on the lack of the necessary conditions to apply the free market principles and the need to enhance the consumption capacities rather than restricting production. These conditions included competition, the solution of excess supply and the securing of well-organized producers and the storage systems.

The official duties of the chambers include working for the development of agriculture, protecting the interests of producers, maintaining the registration of the producers, providing agricultural consultancy, communicating and cooperating with public and private institutions and suggesting agricultural policies. The Chambers of Agriculture, with their ability to negotiate with the decision makers, had an impact on the changes in the policies. This signifies a complex decision-making process beforehand (Hardaker, et al., 2004; Botterill and Mazur, 2004). These attempts provide clues about how policies were negotiated after the policy enactment rather than during the process of policy making. After the enactment of the Hazelnut Strategy in July 2009, the Chambers of Agriculture negotiated with the Ministry to modify the articles related to the prohibition and restriction on the production.

During the negotiations with the Ministry of Agriculture, the arguments offered by the producer groups were as follows. In the production areas with altitudes higher than 750 meters, the production conditions were too difficult, the soil depth too shallow and thus efficiency was low. Also, the hazelnut trees had a factor in preventing erosion in the east Black Sea region. In these areas, there was no production alternative for the producers. Although the cultivation of forest fruits like blueberry and blackberry had been envisioned for these areas, the lack of infrastructure makes it impossible.

During the period between the law enactment and the publication of the regulation, the negotiation continued. Therefore, the uncertainty on the ground was related to the policy-making process. This is an example of the politics of uncertainty (Marris, 1996) this is a kind of delegative democracy through which the market groups negotiate on behalf of the producers while the individuals on the ground experience ambiguity and complexity in relation to the lack of information that would come out of the negotiation among the market groups. The market groups at that stage were the Chambers of Agriculture, the Provincial Directorate of Agriculture and the Ministry.

Efforts to reach a compromise were made only on the discussion of production areas above 750 meters where the production was outlawed. Following the general meetings of Chambers of Agriculture and their visits to the Ministry of Agriculture, the regulations were revised with the removal of the restriction on the production in these areas. In fact, this had been an anticipated the change during the preparation and launch of the Strategy.

The power to make the policy amendments was executed by the Chambers of

Agriculture. As a result of the negotiations, the production restriction in the areas above 750 meters was removed with the Regulation enacted on October 27, 2009. Also, the following cities and districts were included in the production areas: Center and Kaynaşlı in Düzce; Ferizli and Karapürçek in Sakarya; and Kürtün in Gümüşhane. As the negotiations continued, with the latest regulation enacted on February 24, 2011, the following cities were included on the list: on February 24, 2011: Hopa and Murgul in Artvin; Doğanyurt in Kastamonu; Kaynarca in Sakarya; Ondokuzmayıs, Tekkeköy, Alaçam, Yakakent, İlkadım, Bafra, Asarcık, Canik, Dikmen in Samsun; and Ulus in Bartın.

The Chambers of Agriculture collaborated with the business groups on the initiation of free market principles and the restrictions of the production areas. However, after the initiation of the Strategy, the Chamber of Agriculture initiated the discussion only in relation to the restriction of the production areas. The power of the Chambers of Agriculture was related not only to the ability to organize the individuals, but also to be able to interfere into unknowns. The interference was derived from the ability to execute policy changes. Nevertheless, the power could only be executed in relation to the power of other groups. The politics of uncertainty was shaped by bargaining between the market groups.

During the time when uncertainty was experienced on the ground, the bargaining and negotiations were executed among the market groups. Uncertainty was constituted, shaped and maintained by the market groups in a changing environment that embodied ambiguities in understanding the change and interfering in the change. This is not a productive uncertainty that produces emergent groups and new identities. Small producers are in minority not in size but in kind. The

thousands of producers remain in minority in terms of their exclusion of policy making. To deepen uncertainty through complex, hybrid and open spaces; small producers need to be involved.

The producer involvement only was by means of the manipulation of the delegative procedures. Via the TV channels and the manipulation of the President of the Chamber of Agriculture, the producers were asked their opinion; in fact, they are directed by the producer groups and their representatives. The involvement of the ordinary citizens did not signify the lack of their “constant interaction with those for whom they speak and with whom they take part in working out what is to be said.” (Callon, et al. 2009, p. 250) The producer representatives interacted with the producers on *ad-hoc* basis. The involvement of the producers was limited to encourage them to be reluctant to bring their products to the marketplace to control the amount of hazelnut to wait for the increase in prices.

T. is an agricultural engineer working as an employee in the one of the most powerful chambers of agriculture in one big hazelnut city. In July 2009, with T., a journalist, and a cameraman from a TV channel, the chairman of one of the chambers of agriculture conducted fieldwork in the hazelnut villages to interview the producers about the Hazelnut Strategy and its decisions in the hazelnut market. In the early morning hours of that day, they picked me up with the car of the Chamber of Agriculture. T. talked a little about the Chambers of Agriculture by saying “In 2005, Fiskobirlik price was 7 TL, in fact they didn’t sell it in the campaign. Afterwards, the price went down and they had to sell it at 2.5 TL; and put the blame on the Chambers of Agriculture.”

We headed for the Chamber of Agriculture of Ordu. The chairman of the

Chamber would be there to meet us. He would take us to visit the surrounding hazelnut villages. As we arrived at the Chamber, intensive farming certificate transactions were taking place in the rooms of the building's ground floor. We went to the chairman's room on the upper floor.

The chairman's office was of great importance, as in many other chambers of agriculture. The air of authority right at the first step into the chairman's office was obvious. The men appointed to these offices are mainly influential and powerful people who are active players in the market. This atmosphere was accentuated in the rooms of the chambers' central buildings. We met the chairman in his office and then departed to visit the villages after tea service.

On the way to the hazelnut villages, the chairman talked about the market. “[*Hazelnut*] purchases have begun in Adapazari. The price in Hendek is 3.2 TL; the first opening is very important.” About the rumor concerning the alleged flooding of the TGB's warehouse, he noted that this was a “ruse to give 10,000mt of hazelnuts to exporters under the counter.” In addition, he named a factory owner from the region in relation to the TGB's last sales tender and said that the factory owner had purchased the hazelnut at a price of 1.8 TL per kilogram.

The chairman told T. that he had ordered a banner hung that announced that hazelnuts should not be brought to the market early. On our way, I saw these banners in several places. While talking about the new registrations to the Chamber of Agriculture, he added, “Things are going well for us.” In relation to the producers that had come prior to the new law and the registrations that would be made after the new law, he said, laughing, “If registrations have to be renewed, we won't take any fee for that.” He joked that they would execute transactions for free and said, “It will

be free to those who came to receive aid of 150 TL; those, who came before that, had to pay.” In return, T. added, “This week, we registered 97 new members in our chamber.”

Afterwards, we headed towards the chairman’s house. It was crowded. The chairman had five children. Along with his children and his wife, were a disabled child, the care of whom he had undertaken, and the chairman’s mother. When we arrived, the women of the chairman’s family had paused in picking hazelnut to drink ayran. They offered it to us, too. There were a huge hazelnut silo, a barn, and a coop in the garden since the chairman also raised livestock unlike the other hazelnut houses and hazelnut fields. This production environment with large production opportunities was directly associated with the affordability and welfare of the big producers. The chairman position in the chambers of agriculture is generally held by big and wealthy producers or by person who enjoy high esteem from the region’s people, for many years. Therefore, I was not surprised when I saw that the chairman’s house resembled a plantation. The chairman said that it was possible to mine clay, cement, and perlite in the village. Different from other hazelnut villages, it was a village that had resources of alternative production and industrial raw materials.

When the crowd in the garden stood up to continue the hazelnut picking work, we entered the garden with the whole family. That day, the producers were interviewed in the gardens we visited. They were told to speak about the latest developments in the hazelnut market.

The media was exploited not only by the business groups, but also the producer groups. The speeches of the producers had been prepared beforehand. When the

cameras started to roll, the producers repeated the speeches prescribed to them. “We expect them to make a price increase,” “We need money to send our children to school,” and “Say: they shouldn’t bring their hazelnut onto the market.” Another person said, “Associate it with school ... say that you have to bring it to the market early for this reason.” Those who spoke well were applauded after the camera stopped recording. This was a kind of the inclusion of the producers not as a constant and deep interaction with the representative. Rather, the producer’s involvement was only by means of manipulation and delegation.

Subsequent to these interviews, the camera started recording the interview with the chairman. He said, “There’s uncertainty this year. This year, hazelnuts will make money. It’s said that the price will even rise to 6 TL. They should not bring more hazelnuts to town than needed. If there’s a struggle, there will be money. No struggle, no money.” By mentioning a price of 6 TL, the chairman wanted to create a psychological effect on the prices via television broadcasting. He tried to create a speculative price through the use of a rhetorical device.

The enemy-friend categorizing became more apparent through the media articles, channels and press releases (McQuail, 2005; Guttman and Salmon, 2004). The parties of the struggles are constituted by the institutions that are supposed to serve the producers and the business groups as well as by the individuals who represent these institutions. These individuals also represent power in terms of capital ownership including property, media, and social capital as well as education. In that sense, representativity performs the power to manipulate and ascendance to penetrate the flow of information.

The Lack of Clarity of Rules in Implementation

The degree of clarity of rules emphasizes the elimination of any unclear procedures and information communication with the individuals in advance (Callon, et al. 2009). After the initiation of the Hazelnut Strategy on July 2009, the regulation of the law was not published. This gap created uncertainty and unclear procedures. The month of July and August were the significant months when the producers immediately need information about the procedures. In these times, beside the unclear procedures, the procedures were unexpected by the individual producers. The producers were asked the membership fees to be paid to the Chambers of Agriculture. This section examines the unclear and unexpected procedures of the Hazelnut Strategy.

The law, enacted on July 15, proposed that the support payments be paid in a partial manner starting from the month of January 2010 and ending in March. However, the regulation, which included the details of the implementation of the law and the official communication, was published on August 26. The period between July 15 and August 26 is the most lively and dynamic period of the crop season. The late publication of the regulation created a great deal of uncertainties due to the lack of the regulation. The assigned institutions to execute the law had not known how to execute and regulate the law.

The law specified the dates of the support payments that would start being paid in September and would end in December. However, the conditions of the specifications were not regularized. The Provincial Directorates of Agriculture were waiting for the regulation. I visited one Provincial Directorate of Agriculture, located in an old and big four to five-storied building consisting of small rooms along a hall.

There were two or three desks in each room.

During busy times, the line of producers waiting before each desk was so long, the end of the queue reached to the back to the hall. Ms. Ayşe, responsible from the procedures of the hazelnut producers, said that many people had visited the institution after the introduction of the law. She described the uncertainty, saying: “I look at the newspaper every day. We can’t give information to the producers without the publication of the official communication.”

The only specification in the law was that the producers had to receive a certificate to be able to receive the support payment. Therefore, the producers started to make their applications rigorously between September 1 and December 31. Ms. Ayşe oriented the producers on the subject of providing the necessary papers. The representatives of the institution put the requested documents in the pink manila folders that are used in every public agency, giving these to the farmers to fill out, and telling them to fill these documents out and deliver them to the officer in the other room. The producers had to fill out these documents, have them signed by the village headman or a relevant officer, and return them to the Provincial Directorate of Agriculture with the Farmer Certificate they would receive from the Chamber of Agriculture and an identification card.

The reason for these implementations was to be ensured about the certificated/registered areas through the support system and the registration of the certified hazelnut areas. In this way, the producers who cultivated hazelnut in the permitted areas would be determined. The allowed areas would be registered by the Provincial Directorate of Agriculture and the registered producers would be awarded producer certificate.

The producers were assured the knowledge and communication would be spread in their everyday lives via their village headmen, municipalities, local press and word-of-mouth. The producer certificate took into consideration characteristics such as the slope, age, size of the hazelnut area and altitude. The certificate was not given to those cultivating in places in altitudes higher than 750m.

In 2007, the appropriation fee of the Chambers of Agriculture was abolished by state decision, removing the requirement of the farmer certificate. In 2009, however, the farmer certificate became a required document that proved the farmer's status as a reference to the decision of the Constitutional Court (2007/66). The farmer certificate, which was provided by the Chambers of Agriculture in exchange for a membership fee, payable per decare, became a major financial source for the Chambers of Agriculture.¹⁴⁹

In 2009, when the farmer certificate was required by the Law on Hazelnut Strategy,¹⁵⁰ the Chambers of Agriculture started to charge a membership fee to be paid from 2006 to 2009. They also demanded that any unpaid payments be paid before they would provide the farmer certificates. The farmer certificate was one requirement needed to be able to receive the support payment to be paid from 2010 to 2012.

With the aim of providing convenience for producers, the chambers did not ask for the fee for 2009 to be paid in the same year.¹⁵¹ However, the producers who were in debt to merchants, for instance, calculated what quantity of hazelnut the merchants

¹⁴⁹ The details of this were analyzed in Chapter 6.

¹⁵⁰ The requirement of the farmer certificate to be provided by the Chambers of Agriculture in the exchange for the past membership fees from 2006-2009 became a power device for the chambers during the negotiation with the decision makers.

¹⁵¹ The producers have only asked to pay the membership fee for the previous years, although the fee for 2009 would be paid next year.

would buy against their debts. Therefore, an unexpected debt was charged to the producers.

During that period, the producers who visited the Chambers of Agriculture seemed upset, confused, and troubled. They acted reproachful during the execution of their transactions. The atmosphere resembled an awkward state bureaucracy. This intensity and tension also had effects on the motivation of the Chambers' employees. The only transactions that were executed were those that were based on the payment of membership fees.

The introduction of the requirement of the retrospective subscription fee from the producers was in consequence of the receipt of the farming certificate being rendered obligatory for support purchases. For the convenience of the producers, it was decided that the subscription fees pertaining to the relevant years, excluding the year 2009 would be collected. This was unexpected for the producers not directly associated with the Chambers of Agriculture. They began to react to the officers of the Chambers of Agriculture. During the period I spent at the Chambers of Agriculture, which are one of the networks of reaching the producers, I had the opportunity to experience the reactions of the producers, based on observations and impressions. The producers reacted to the fees payable for the previous years. They began to question the functions of the Chambers of Agriculture. Along with producers, who showed their reaction by grumbling or leaving the building, there were also producers who demanded to speak with an authorized person. Even though these reactions did not turn into any comprehensive reactions, none of the producers waiting in line was happy with the situation.

The Degree of Equality and Transparency

The small producers, unorganized producers, weak resistance mechanisms and the producers who produce hazelnut as their primary income do not have the equal access to participate the socio-technical controversies. The inequality is also related to the access to the information. These minority groups experienced uncertainties due to unexpectedness and unknowns. The formal institutions were equipped by advance information and became aware of the possible changes. I learned about the Hazelnut Strategy before the formal announcement, from an employee of the Commodity

Exchange:

Despite the difficulty of reaching the secretariat, three weeks ago, we have met with the Undersecretariat of the Prime Ministry for Foreign Trade. In just five minutes, even before we asked, he started saying that ‘first, we won’t give support price; second, we won’t purchase hazelnuts through the TGB; third, we’ll provide direct income payments through the Farmer Registry System; fourth, under the framework of EU accession, we’ll limit production areas and we’ll combine some production areas.

Along with Law No. 5200, enacted in 2004, as a reference to the EU Acquis, the cooperatives were replaced by Agricultural Producers Organizations. With the law, however, the role and activities of the new producer organizations were changed. The Law proposed the foundation of the organization for only one product group. According to the Law, the organization could make revenue from service fees out of the profit from the sales of product marketing via the organization. However, the organization could not distribute profit shares to its members. This restriction removed the ability of the organization to be involved in the direct sales of the product and prevented the organization from becoming an economically viable and

active entity.¹⁵² The case of the Keşap Hazelnut Producer Organization will be analyzed in the section in relation to the role of new producer organizations, the significance of information channels, network relations and how uncertainty is tried to be managed on the ground.¹⁵³

The case of the Keşap Hazelnut Producer Organization, as an example of the new producer organization, is examined within the framework of the EU regulations. The resistance mechanism from the Organization is based on the production efficiency (i.e., food certification, Good Agricultural Practices), the ability to be involved in the networks of policy making to be able to acquire information beforehand and the attempts to organize sales channels.

The Keşap Hazelnut Producer Organization was founded by M.Ş., with whom I had several opportunities to work. Our first encounter with M.Ş. took place at the report preparation stage of the commission on the estimation of the amount of crop. He was participating as an expert. M.Ş. was known as the “Professor of Hazelnuts” in the local market. He was an intelligent and ambitious person struggling to increase the productivity and efficiency of hazelnut production with the single trunk structure. He also was monitoring Good Agricultural Practices¹⁵⁴ in the hazelnut market. These activities were initiated in the hazelnut market by M.Ş. He was actively working on the Board of the Chambers of Agriculture besides his membership to the Chamber of

¹⁵² The reason, from a market-oriented perspective, was to eliminate any market distorting activities of the producer organizations.

¹⁵³ In 2009, there was only one hazelnut producer organization.

¹⁵⁴ Good Agricultural Practices (GAP) aim to ensure safety and the quality of produce in the food chain, to capture new market advantages by modifying supply chain governance, to improve natural resources use, workers health and working conditions, and/or to create new market opportunities for farmers and exporters in developing countries. GAP includes codes, standards and regulations that have been developed in recent years by the food industry and producer organizations, but also governments and NGOs (FAO, 2012).

Commerce and National Hazelnut council. He was also a market actor who had been creating and shaping the struggles and knotted relations between the institutions.¹⁵⁵

On the day of the announcement the Hazelnut Strategy on July 15, M.Ş. had sent all of his members an SMS to attend a meeting on July 16 at 12:00 at the Keşap Hazelnut Producer Organization. The aim of the meeting was to explain the regulations and changes arising with the law. He knew about the Strategy by involving in the socio-technical controversies as a representative. In the same vein to the representative of the formal institutions, he shared the details of the Strategy with producers after the formal announcement.

I went to the office on the meeting day a bit earlier than the scheduled time. M.Ş. proudly said his telephone had not stopped ringing the night before because of calls from journalists. As he was a popular person, he was in good humor. Dozens of producers came to visit him. The Organization shared the same office with the Keşap Chamber of Agriculture. M.Ş. explained that they were going to have a new office and at every opportunity said that the deficiencies would be eliminated for it to be understood that he had achieved significant and valuable deeds. The operations in the Keşap Hazelnut Producers Organization, which were progressing systematically, were subject to multiple audits and controls in the production stage within the scope of the Good Agricultural Practices certificate. He showed the little colored producer books. The books, which gave detailed information on the producers and their production conditions, were distributed to the producers to record their production activities (i.e., the amount of fertilizer, the amount pesticide).

¹⁵⁵ He was very helpful to my studies as he explained the hazelnut market at length and shared with me hundreds of files he kept on his flash disk. Among those files, there were letters representing the Chambers of Agriculture addressing official organizations including the prime ministry that were evidence of his on-going struggle.

M.Ş. had been involved in the activities of the technical commission on the preparation of the Hazelnut Strategy on behalf of the Chambers of Agriculture. He was the person who knew about the possible changes from these commission discussions. As he was a member of the Chamber of Commerce, he was informed about the changes in the export market.¹⁵⁶ After the law was enacted, he was proud about having known the details of the law beforehand. He was also satisfied with proposals and changes that were initiated by the Law. A producer entered, saying: “Aha, the law is out,” and M.Ş. answered: “What we say is happening, right?”

When the time was past 12:00, we slowly made our way through the meeting hall. A 4-page memorandum was distributed to the producers. It summarized the speech of M.Ş. and had one of his newspapers articles attached, titled “Worms Eating the Inside of the Hazelnut”. M.Ş. started his speech by informing the crowd about the recent changes and developments in the agricultural sector in general and in the hazelnut market in particular. The knowledge of M.Ş. constituted the basis of his power by being closer to the information and decision-making networks.

The purpose of the meeting is to inform our producers about the hazelnut strategy and its methods. Regarding the implementation of the Law, we are in the 1st Standard Region. Turkey is divided into 30 basins for 186 product patterns. We are in the 19th basin. Note this and know it well. Ordu and Giresun are in the hazelnut basin. According to the Strategy, hazelnuts shall not be produced above 750m of altitude or less than 6 percent of slope. For those producers who produce in areas above 750m, we have not accepted this since 2006. Look, we were saying since 2006 until this time, it was realized in 2009! (Appendix, 31).

After making a brief introduction to the Law, he continued with the details, particularly in relation to the implications of the Law for the city of Giresun and the

¹⁵⁶ Nevertheless, he did not know about the daily export and forward prices, which shows how the export process is global and remote from the local market processes.

members of the Organization. The idea of the speech was to provide a roadmap for the members and to create an impression that they were doing the best in hazelnut production.

Do not listen to what's being said on the street ... Throughout Giresun, there is an area of around 100,000 hectare. 17,000 hectares out of this area is identified as illegal. If we could accurately determine the crop level as 76,000mt [2009 crop estimation for Giresun], meaning 76 kilos from a 1-hectare area, do not forget we will take this as the basis. Last year this was 120 kilos. As Giresun we could not produce 120 kilos of hazelnut per hectare, it has increased to 225 in Terme, 230 in Çarşamba and 186 in Düzce.¹⁵⁷ Ordu is lower than us, achieving the best production in these areas is Keşap ... It is not possible to change the government-state strategy.¹⁵⁸ Now what shall we do? We will give a concept, we must directly guide, we must not receive information from others, and we are different from others ... Now there will be market when the TGB comes out. [*Calling the names of two producers*] Erol and Fikret! Get up! This year their production is more than last year's, around 300. Where are those who said that there is periodicity? They say it gives 1 year it doesn't give 1 year. Come look at my producer [*makes a few producers he calls stand up*]; do not write from where you're sitting. Okay, sit down (Appendix, 32).

He had a perspective in terms of the producers who were mainly full-time cultivators. Those who did not care much about their hazelnut orchards could not be members of the Organization. The speech also included strategies to be applied in relation to the law enactments. As M.Ş. was very satisfied about the details with the knowledge acquired during the preparation, he was confident about the proper implementation and positive implications on the hazelnut production of the Organization. This confidence was based on the calculation of price forecast, which was the same as what the exporters forecasted.

¹⁵⁷ These large and flat areas allow large scale production. However, there is no accurate knowledge about the exact amount of hazelnut production in these regions due to the fact that it is shown as higher in the crop estimations than the real numbers, and also due to the lack of accurate number of unregistered areas (Please see the Chapter 3).

¹⁵⁸ The Law has been changed for the prohibited areas. On February 24, 2011, the prohibition was removed for the areas above 750m and for some areas with 6 percent of slope.

This strategy is directly affects Giresun positively, not just yet, at the end of three years, with the uprooting of the hazelnuts on the bottom land ... We have 76 kilos production, additionally we will get 150 TL of money, 150 TL according to 76 kilos means 2 TL, this means the hazelnut has seen 2 TL before going down to the market, if we sell at three to the market it will be to five ... if we sell at four it will be six (Appendix, 33).

This calculation was the same as the ones the exporters have done. This similarity shows that the rhetorical device of the exporters has been adopted by the producer organizations. The same rhetoric has been used in the local markets in discussions, policy-making, forecasting and convincing.

M.Ş. also mentioned the calculation by which he tried to prove that they had to increase productivity and the level of production to increase their revenues. However, the calculation was based on the assumption that the hazelnuts would be uprooted in the non-permissible areas and, as the amount of Giresun quality hazelnut increased, their revenues would increase. He said, “We have to trust [*to the state*], it’s the state, the Minister, he said ‘we will not let anybody produce hazelnut in three years,’ and he can, with laws and police force.” Nevertheless, at the end of the three-years, the uprooting of hazelnuts trees had not been done by the producers. No police force had been sent. When I shared my opinion with M.Ş. that nobody would uproot their hazelnut trees and that this was known by the decision makers and also desired by the exporters, he was surprised. He was very confident that the law would be applied properly.

For the sales strategy, M.Ş. recommended that the producers develop storage facilities for hazelnuts to be sold in the following months when the spot prices were in a rising trend. He explained this strategy in relation to the storage, cracking and network linkages. He emphasized his relations with the formal institutions as well as

the advantages of Good Agricultural Practices. With the Good Agricultural Practices, around 50 producers produced hazelnut with certificates. He said:

We will sell with the help of the Organization. For this, we must find a warehouse ... I am on the boards of the Black Sea Exporters' Union, the Commodity Exchange and the National Hazelnut Council ... The hazelnuts have to be high quality. We must prepare as if we're giving them to the TGB [*in terms of technical specification*], its moisture, aflatoxin etc.¹⁵⁹ ... With the Certificate of ECAS,¹⁶⁰ we can also sell to Migros¹⁶¹ throughout Turkey ... Let's provide cracking, packaging, labeling, and branding ... Let's concentrate on these. We're not making the decisions behind closed doors before announcing them to you. How can we sell our hazelnuts from a single hand? How can we create the Keşap brand? Is there anyone who has recommendations on food safety and market dimensions? (Appendix, 34).

M.Ş. described the debt position of the producers, which was the main obstacle to them getting organized. He said, "I don't trust the producer. The producer is in debt, he sells immediately." If a producer is in a debt position to be paid immediately, s/he has to sell hazelnuts to acquire immediate cash in return. This situation leads to discrepancies in terms of a collective action of the producers on the basis of the producer organization. He made his recommendations as follows:

If you have debt, sell a certain amount of your hazelnuts to cover your debt and leave the rest. There are those who use agricultural credits, I know, they have payments in October; they may maybe make a quantity of sales. Let's put up a fight! Let's sell our sweat and blood for a better price. Let's increase production! Let's increase the quality! Let's obtain our food safety certificates. We will resist the market. We are stronger than the market! (Appendix, 35).

¹⁵⁹ In 2009, these attempts were not finalized. The reason was that, due to the low crop level, the price in the market was satisfactory for the producers.

¹⁶⁰ MPS-ECAS is a certification organization in the form of a limited company. The certification is provided for Good Agricultural Practices.

¹⁶¹ One of the largest retail company stores in Turkey.

He also described the alternative support programs to be applied as an opportunity for the producers. He sought new support opportunities for the producers as extra agricultural revenue. For instance, he recommended the production of bamboo, which has been entering into the state support program, as a new product for the hazelnut producer. Furthermore, he told them that Migros had been asking for certified kiwi, and that they might work to receive certification for kiwi by establishing a Kiwi Producer Organization.

One producer asked, “What will we say in the coffee-shops as delegates?” He said, “I talked to the Vice General Director of the Chambers of Agriculture. When it [*the law*] was first announced, everyone entered into a panic, but then they understood, too. The Chambers of Agriculture will make a declaration. We decided among ourselves to give a preliminary briefing and documents to the delegates.” When one producer commented that, “You’re talking with very good intention,” he replied, “I trust in the area, production, and yield.”

The activities of the Keşap Hazelnut Producer Organization generated both strong and weak type of dialogism. The impact of this mechanism was related to a number of factors, including the focus on efficiency and productivity, the information channels, the proximity to the decision makers and the involvement in the socio-technical controversies. Moreover, the Organization is also important in terms of the ability to create, manage and manipulate uncertainties. As the members of the Organization produced hazelnut with high efficiency and productivity, the revenues of the producers grew and became less fragile against price decreases and instabilities.

However, the scope of the organization was limited in terms of the number of

members (around 50-60 in 2009), which weakened its impact. The number of producers to be involved in such an organization was limited due to the requirements of the Organization in terms of production conditions, audit requirements and the necessity of full-time commitment to production quality. The limited number of the producers was a two-sided implication.

First, it was related to the reluctance of the Organization to accept the producers who did not tend to commit to the production conditions. The acceptance of a membership of a producer depended on the decision of the board of the producer organization. Each producer organization had its own regulation that defined the special conditions for membership. Each producer was responsible for paying his membership fee.¹⁶² In the case of the Keşap Hazelnut Producer Organization, it mostly depended on the decision of the head of the board. This acceptance mechanism of a producer organization created power distance on the side of the prospective producers.

Second, those who cultivated hazelnuts as a primary income spent their full-time energy on hazelnut production. However, they were not aware of these types of mechanisms. Especially, those who lived in remote villages had to travel a long distance to reach these organizations and networks.

¹⁶² The membership fee cannot be 50 percent of the minimum wage or lower than 10 percent of the minimum wage.

Uncertainty on the Ground

On September 1, 2004, the Union of Hazelnut was established in Ordu. Even though the court procedures with the institution continued, regarding the bylaws and practices, the institution continued with its activities protecting the rights of the producers. The Union of Hazelnut, as a small, active yet ineffectual institution, also publicized reports, press releases, price propagation in order to create public awareness and to protect the rights of the producers. The institution was against the liberalization of agriculture and the reforms initiated by the international institutions. One of their reports was titled “Don’t Let the Alien take our Hazelnuts, Don’t Let the Hazelnut Be of the Alien.” The word of “alien” meant the global power and capital.

Although the Union of Hazelnut did not possess a price making power, the institution speculates on the prices. In 2008, for instance, they speculated on hazelnut prices by saying that “The hazelnut prices essentially should be at 6.48 TL, including 25 percent of the profit margin and 20 percent of the welfare effect.” In their press releases, they criticized the uncertainty creation due to the lack of accurate information flow in relation to the level of stocks, pricing, decision makers and what the roles were to be assigned and to whom.

By studying the field studies of the Union of Hazelnut and the People’s Houses,¹⁶³ I observed their relations with the producers on the ground. These visits were on a volunteer basis. The idea was to organize the producers against the prohibition of hazelnut production at 750m and higher. Their aim was to create at least awareness among the villagers against uprooting the hazelnut trees at elevation

¹⁶³ The People’s Houses that were closed following the 1980 coup were re-established in 1987 as a union that are organized in 63 branches to struggle for social equality and justice. For a history of the People’s Houses, see Karpat (1963).

750 and above. We were four people, including the head of the Union of Hazelnut (K.), an agricultural engineer, and a retired teacher from community centers. We traveled with the teacher's car.

K. as always was bustling and busy. We stopped by a few places before getting on the road. Lastly, we stopped to get the village names and elevations and the farmer registry records from the Provincial Directorate of Agriculture. The team members were talking among themselves. One of them said that he could find a good price for a hazelnut-picking job. Retired people or those with fixed incomes sometime take hazelnut-picking jobs for additional income. The owner of the car also gave private driving lessons for additional income with his car, and he had posted that ad on his car.

We started on our way towards villages D. and T., located in areas above 750. The flooding that had happened a week earlier had caused heavy damages in the region. Some roads had collapsed, the river was flowing fiercely, the tree roots and branches it had broken away were snagged in the rocks and suspended. Garbage hung on the branches and rocks, having been swept from the B. dumpsite nearby.¹⁶⁴

When we reached the D. village, the midday prayer was nearly over. Due to it was been Friday, the appointments were arranged according to the prayer and the sessions were generally held in front of the mosque. After the *salaat*,¹⁶⁵ the villagers, around 20 producers, gathered at the mosque. One villager, with a friendly and

¹⁶⁴ There are many floods in the east Black Sea region. In 2009, three big floods happened. The dirt roads we drove along between villages remained under the water. The roads were full of rock pieces and tree branches and roots flowing down from upper ground were scattered around. We had difficulty driving along a sloping road that remained submerged after the flood. Stopping and dropping stones on the side into the water, we tried to measure the depth of the water and finally we managed to pass with the height of the rocks. When continuing on the road we saw the floodwaters continued to flow into the road between the hills. When talking of these waters they mentioned *keme*, an illness similar to infection that occurs as the result of water flowing from flood waters mixing into the clean water. When we returned to the district again, another rain announcement was being made.

¹⁶⁵ Ritual of worship centered in prayer, *namaz*.

respectful manner, served everybody tea. They said that the funding for the mosque had come from the village. Its construction had started three to four years earlier, that the workers had come from the village, the rough construction had been finished and the fine construction remained and that the decoration of the mosque was going to take a lot of time. In the village school, on the other hand, there was a single teacher for 18 students and it had been closed because of migration. Following the introductory discussions, K. started his conversations with the aim of creating awareness among the producers against the prohibition of the production in areas above 750m.

There will be never any force for you to uproot in the upland villages. The uprooting is proposed to be executed in three years with 600 TL of the subsidy payment. But the subsidy will not even suffice for the pulling up the trees. For the decision makers in Ankara, 2,400 TL [*the total cost of support payment*] may seem like a lot of money, but it is little for the costs of uprooting [*on the side of the producers*]. For the price of hazelnuts, we said [*the price as*] 6.96 TL they laughed at us. The state, for the first time, did not announce the purchase price. Be it little be it much, when the state announces the price, the merchant behaves accordingly. If the merchant will set the price, then the state should protect the producers ... How shall we show resistance to uprooting? (Appendix, 36).

In response to the arguments of K., the producers started discussing the problem of hazelnut production and the lack of alternative crops in the region. More importantly, the discussion mainly included how the decisions had been executed without taking into consideration the conditions of the locality. Another producer, on the other hand, was 65 years old, but excited, quick and looked younger than his age. Later I learned that he had children in Istanbul and that he came and went to Beykoz. He said: "Can I ask something? The TV announced that trees above 750 would be uprooted. I watched. We are uneducated people, but now through TV and Internet, we can learn

now. But, what will we do [*alternatively*] here?” The discussion was based on the difficulty of the geography where the land was high, steep and hilly, which made agricultural production very difficult.

Another producer said, “We were told that we can produce strawberries, but due to frost, we cannot produce strawberries. We can’t engage in beekeeping either. It is high here and smoke [*arising from height*] finishes off the bees. But we can produce hazelnuts.” The producers were confused because they did not know about the next step or how to uproot their trees. One producer said that “We don’t know what we have to and what to do.”

During uncertainty, the producers became inert and disabled while they did not know what they would do and need to do. The dialogues in the market and everyday life, similar to the subjects and content of many discussions, also were related to the state-producer relations, the price formations, the producer’s habits in change processes, the changes in purchase policy, and the reactions of the producers to these policies, changes, gaps and processes, as well as the potential solutions.¹⁶⁶

Against uncertainties on the ground, the loyalty of the producers to hazelnut production and to the land proved the significant strategy. The approach of attachment to the land was the indication of a sort of neighborhood pressure and pride. A producer who represents this approach said the following:

I haven’t had expectations from hazelnuts for five years. It has just become an issue of pride, so that nobody can that ‘Halil [*himself*] has come, but not harvested hazelnut’ ... it is my father’s land; I harvest the product and sell anytime I need cash... There was collective work in the village, maybe 10

¹⁶⁶ The activities of the Union of Hazelnut have not created a common ground to create a mass protest against the prohibition. Nevertheless, these activities on the voluntary basis, which is not derived from any financial benefits, are worth mentioning in relation to their struggle to create awareness among the producers in terms of the recent changes in the market.

years ago ... We will absolutely come to harvest, God willing, let it happen, then. You can't leave it [*hazelnut*] in the orchard... I will continue [*production*] under any condition, but my children won't. My father left when he was 45. I'm striving hard for [*my children's*] education...it's difficult to get by. We bought a new house, I have a new job, and I earn 1,000 TL a month (Appendix, 37).

The producers perceive ownership as a social value and belonging rather than as a figurative term. The property situation of the hazelnut orchards can involve different conditions, such as with title, without title, with joint title, with title transfer made, without title transfer yet common in use. However, since the titles are not divided into the number of sharers, the land is shared among the family members. Therefore, the loyalty is the position of the producers to the social relations rather than property relations. Property relations are identified in relation to the land sharing, the size of the land, the dependence on the property and sharecropping.

The producers share the land in two ways: title of ownership and possession. Property relations point out the blurred boundary between ownership and possession in terms of uncertain land measurement and how the identification of possession is different between the public and private sphere.¹⁶⁷ The title of ownership is related to the legal owner of the land, who is usually an elder member of the family. Many producers prefer to transfer the title of ownership to one person. There are two reasons for this preference.

First, separation is not preferred to avoid the cost of title transfer (i.e., in the case if the owner is alive). The reluctance of the separation of the title is related to the cost of paperwork. Many producers are reluctant to separate the land due to the possibility of losing their health insurance.

¹⁶⁷ For a brief analysis on the literature, see Sementelli (2007).

One producer explained his reasoning as follows: “We’re four siblings, we have 28 decares of land, we did not do the transfer, when you transfer you become exempt from the Green Card.¹⁶⁸ I can’t afford its costs. For subsistence we raise animals and I work on construction sites.”¹⁶⁹

The second reason is to avoid the partition of the land. The producers informally separate the lands according to the members of the family who have the right of sharing, even though there is one single owner of the whole land. One producer explains the informal separation of the profit as follows: “We have a nine decares place; we two siblings share the profit. The title is still on one person, thus it is not separated.” There are no legal boundaries to the interlaced hazelnut orchards. The producers erect poles or set their borders with fencing wire.

In both cases, although the legal owner is a single person, the profit that comes out of the production is divided among the other members of the family who have the right of possession. Separation, however, is conducted in informal ways, which can cause uncertainty and hostility among the family members. This attitude is associated with the hostility and individualistic, stubborn character of the people of the Black Sea region. One producer said, “There is no habit of becoming a cooperative in the villages. There are lots of border fights, site divisions and murders.”

Gender relations are also significant in the land sharing. A woman explained the gender relations as follows: “Since 1948, when I was born, no land share has been given to any women. They [*father and brothers*] give money. They wouldn’t

¹⁶⁸ The Green Card is health insurance provided for those who do not have possession of property or social security and whose monthly income is less than 1/3 of the minimum wage (amount excluding social security premium). The Green Card policy was abolished in January 2012.

¹⁶⁹ In 2012, the fee of the paperwork has been cancelled and the separation is to be conducted automatically after the death of the owner.

want to give 5,000-6,000 TL to the girls, because they might go [*marry*] outside.”¹⁷⁰

A woman producer described the difficulty she faced as follows:

We are seven siblings with our mother-in-law. I have six children. I come for the hazelnut harvest in the summers; I live in Istanbul in the winters. I am a housewife. I have no social security. I make use of the children’s social security. We bought nine decares from my father-in-law. The land is registered as the land of the Treasury. We are struggling to fix it because it should not been registered as Treasury land. For nine years, it has been shared with my uncle. Next to our land, there is also the land of my father-in-law (who died nine years ago). We took the title deed recently; we’re dealing with it badly. The title of this land will be shared. Everyone gave the power of attorney to one person. The inheritance was received just yesterday. My sister-in-law processes the land of my father-in-law’s place. I harvest only the area that is mine” (Appendix, 38).

Women did not want to talk much about land sharing, as it is considered shameful for women to talk about it. If the father is alive, the women do not want to talk because it is considered disrespectful. It is certain that the land will be shared out among their brothers. Women do not receive a share from the land, even though they are provided some cash money in return.

In the farmer registry system, land size is recorded on the basis of the data that the producers revealed by word-of-mouth. Since the cadastre system has been recently completed, there are inconsistencies between what the cadastre system revealed and what the producers reported previously. For instance, in the central and west Black Sea regions, some producers reported that the size of their hazelnut orchards was larger than it actually was in order to give greater amounts of hazelnuts to the TGB.¹⁷¹ Therefore, this misreporting might have led to inconsistencies in the

¹⁷⁰ “Going outside” means a woman leaves the family to marry becomes a member of her husband’s family.

¹⁷¹ Some producers have also registered their production area for other products (i.e., watermelon) along with hazelnuts to benefit from the support purchases. In that sense, I did not trust the data of the

calculations of such variables as support payments, crop estimations, and hazelnut production areas.

When I visited the Directories of Title and Cadastre offices, I observed how the lands are measured on big computers screen, transforming the land into a sequence of numbers. Cadastral studies have been conducted for many years; however, they were not finalized until a private company was hired to do it. The cadastre studies are crucial for the producers, especially those with large families and too many claimants, and for those who produce hazelnuts in areas recorded as forest.

The cadastre starts with the measurement of the coordinates of the land. The borders are determined by three court experts elected by the village headmen. The cadastre consists of forest work and parcel work. Agricultural engineers, forest engineers and contractors conduct the forest work. The parcel work is conducted by three to six people together with the village headmen. If the land is identified as belonging to the Ministry of Forestry, it is reported to the Treasury. One producer explained as follows:

The cadastre passed, they gave the title deeds. It would have been better if it hadn't passed [*wish to stay in status quo*], the amount of land was decreased. It had been measured before as well. It was 33 decares but now [*after the cadastre*] it decreased to 23. Of the five people two are girls, they have lands, two are men, and one is the mother. We have about five decares of land. Since we did not know the exact borders, it was a shared title; otherwise, it would be a personal title. Resentment and anger occurred in title sharing. If the (cadastre) had not happened it would have been better, everyone was taking care of his own place and going on (Appendix, 39).

Farmer Registry records or the panel data retrieved from the formal institutions (especially those to be used in a scientific and academic study).

The producers were asked about the size of their land. They always gave net figures about the size of their hazelnut orchards. However, net figures do not necessarily mean that the figures reflect exactly the correct numbers. The size of the orchards may change according to the different land status, such as joint titles, areas without titles and individual/divide areas.

Especially, after the completion of the cadastre studies, the difference between the digital measurement and what the producer's records had led to re-calculations of ownership, possession and usage among family members. The producers consider the results of the cadastre studies as inconsistent and inaccurate. The discrepancy between the taken-for-granted measures and the new measures created more uncertainty when the discrepancy converged with the different land status.

Sharecropping also signifies the loyalty to the land. This is a reciprocal relation between the owner and the sharecropper on the basis of the division of labor between the two parties. While the owner provides land and the house, the sharecropper undertakes the production of the hazelnuts. The sharecropper also undertakes the cost of production. The profit, after the cost of production, is shared mostly at 50-50. The sharecroppers are hazelnut producers who are in need of cash, live in the upland villages, and live in the homes of the owner as tenant farmers. The sharecropper and the owner agree on a lease contract and in some cases the village headmen also sign the contract.

Today, sharecropping is considered unprofitable as it creates losses for both parties due to the cost of production and price instabilities. Sharecroppers do not pay rent to the owner. They raise animals and grow vegetables and hazelnuts. The sharecropping relationship is more common in villages where the owners have a high

income level, with the highest levels of education and live in big cities.

Conclusion

This chapter explains the nature of the constructed uncertainty in the local market. The uncertainty experienced by the market agents on the ground is created through the market groups. The constructed uncertainties include the exchange relations, yield measurement, calculative tools, price making, the purchase and price policies of the state, and the communication (i.e., information sharing) during the implementation of the state policies. Uncertainty is experienced during the implementation of the policies and market making. The chapter identified two areas of constructed uncertainty: the ability and inability to interfere in unknowns. Therefore, the constructed uncertainty is defined as the ability to create rhetorical devices and the inability to interfere in unknowns.

Dow (2004) says that what cannot be explained in economic models is classified as uncertainty. Economic models can capture aspects of the complexity and thus add to causal knowledge. However, what sets this logic in studying uncertainty apart from the purely economic logic is a taken-for-granted approach towards the creativity of individuals and the evolving social patterns of behaviors in an economic structure that changes in inevitably unpredictable ways. The chapter provided an analysis of the local market, which is identified as an arena in which the market groups interplay in the construction of uncertainties. This arena lacks a collective that allows the involvement of the identities of emergent groups (i.e. Keşap Hazelnut Producer Organization, the Union of Hazelnut).

According to Callon et al. (2009), socio-technical controversies engendered unpredictable trajectories and unknowns. The key factors were the power stance of each institution, their sphere of influence, their diverse position within the institution, and their representation in front of the public. However, in these controversies, the agents organized and controlled the policies rather than prevented or eliminated the harmful impacts of the policies. The interplay includes constant interaction, communication and the production of rhetorical devices (Syrett, 1995). As such, the market dynamics are constituted by an ongoing motion and dynamic contests to satisfy the conflicting interests.

The chapter provides an analysis on the weak degree of dialogism in the construction of the Hazelnut Strategy. Such an analysis provides an understanding of the gap that is the result of the exclusion of the producers and the asymmetry between specialist and non-specialist. The degree of dialogism is analyzed within the perspective of a collective, which is collaboration in the market.

The socio-technical controversies of the Hazelnut Strategy generated the intensity of cooperation to compose such a collective. The composition (i.e. composition of singularities) concept is different from the aggregation (i.e., aggregation of individual wills). In 2005, the creation of the composition was initiated with the identification of the common problem areas. However, throughout the controversies, the lack of diversity and the elimination of the minorities resulted in the power execution of the dominant groups. This monopoly of the established groups weakened the quality and continuity of a collective.

Furthermore, the weak control of representativity of the spokespersons could be observed in the initiatives of the producer representatives to negotiate the right of

the producers after the initiation of the Strategy. Especially, during the length of time in negotiating and changing the law, the producers in the hazelnut villages above 750m remained in uncertainty. Moreover, the inclusion of the individual producers was limited by encouraging them by staying reluctant to bring hazelnuts to the marketplace. Also, they were manipulated by the producer's representatives on the TV programs. They were told what the representative let them to say on the TV channels. Again, the lack of clarity in implementation and the lack of transparency and equality in the access of the producers to information resulted in uncertainty on the ground.

This chapter considers the impact of the constructed uncertainty in the everyday lives of individuals. Even the transactions cost approach is perceived as beyond rational calculations by opening the "black box," namely the process of market making, that are constituted by individual decision makers and under the influence of these agents (Chapman and Buckley, 1997; Menger, 1963; Caldwell and Boehm, 1992) and material things (Çalışkan and Callon, 2009a, 2009b; Zelizer, 2007). As such, this chapter examined how uncertainty shapes the behaviors of market agents and also how market agents constitute uncertainty. If uncertainty might be characterized as the taken-for-granted nature of the market system, what is to be questioned is the constituting nature of uncertainty in market making. With the aim to overcome uncertainty, this chapter investigated how the market is formed through unknowns and how the constructed uncertainty constitutes the market.

Through informal mechanisms, such as loyalty to the land and the commitment to hazelnut production (i.e., through land sharing, sharecropping), the individual producers generate the ways, relations and methods to deal with uncertainties.

Nevertheless, the uncertainty for the individual producers is related to their inability to interfere in unknowns. They are isolated from the contested relationships of the institutional realm.

In light of this dichotomy, the producers and weak market groups might be identified in relation to the resistance mechanisms. Since 2004, new resistance mechanisms, such as producer organizations, have emerged in the local market, whilst the existing mechanisms (i.e., debt relations between the producers and merchants) have been replaced by formal means (i.e., bank credits). These mechanisms need to be analyzed within the context of the unequal landscape, debt and structural adjustment as well as the changes included by the agricultural liberalization. The market imperatives that the agricultural market confront consist of destabilizing competition as the markets become integrated and thus uneven distribution and exchange emerge both between and within markets in the process of globalization (Weiss, 1997).

In light of these changes, this chapter provided a general conceptual framework on the transformation of agriculture. The small producers are becoming less viable together with the harvest and life styles. The rural residence (i.e., in the area higher than 750m) becomes dissociated from the change (i.e., policy making) and resistance (i.e., producer organizations) mechanism (Granberg, et al., 2001).

The analysis on these mechanisms has two further implications. One is that if the attempt of global market actors (i.e., Ferrero) to enter the local market directly may lead to sub-contracting, the loyalty to land might be damaged and the main mechanism of resistance might collapse. The other implication is in relation to the attempts to develop licensed warehouses and the development of the commodity

exchange. However, for the small producers and for those who cannot afford credit financing from the bank, the removal of the intermediaries (i.e., merchants, grocers) due to the license warehouses would lead to the collapse of the debt system. As the loyalty to hazelnut production and the debt relations are the only resistance mechanisms of these producers, the possible collapse of these mechanisms might lead to destruction on the ground.

CHAPTER 8: CONCLUSION

WHY STUDY THE MARKET?

The dissertation started by asking what uncertainty means in market making, and what roles the production, representation, dissemination and limiting of uncertainty play in market maintenance. Such an inquiry required studying the market and its constitutive dynamics. Neo-classical economics defines the *spontaneous order* of market as the perfect match between the factors of price, supply and demand in an optimum equilibrium. Neo-institutionalist approach reveals the socially constructed nature of the markets and discusses how economic activities are embedded in society through efficiently institutionalized means and institutional struggles. New economic sociology analyzes the embeddedness by providing a middle way between economics and sociology. This approach intends to understand how the markets are created through informal social ties and trust relations. However, these approaches probe only single aspect of the market design: prices, institutions, networks or classes.

New directions of research in market studies aim to study not markets but marketization as the complex and constant process of market making. As such, the market constitution includes an interrelation and interplay between and among these aspects and their making. Moreover, what does uncertainty mean in such an interaction? The analysis of the process of market making provides the answer to this question. The dissertation analyzed market making and its politics and revealed that the market is constituted and maintained by uncertainty; and at the same time,

uncertainty constitutes and maintains the market.

The dissertation examined the material goods, agencies, textual and material devices and encounters as well as how they produce uncertainty. The market is made through the constant production of uncertainties in prices, exchanges and controversies. The analysis of market making revealed a number of conclusions. First, the conditions under which the things are produced, calculated and exchanged shape the market constitution in different localities with different socio-technical tools and agencies. Second, the market is maintained by informal institutions and informal exchange relations. However, these institutions are not embedded in the formal institutions; instead, informal institutions are in competitive interaction with the formal institutions. Third, market prices are created in different spheres and each price tier interacts in different power configurations. This interaction among the market agents in different spheres produces uncertainties. Fourth, formal institutions contribute to market maintenance by preserving their power position through creating rhetorical devices (i.e., categorization, threats, suspicion, and emotions). Fifth, the implications of the above-mentioned processes of market making were examined within the framework of constructed uncertainties. It was found that the weak degrees of dialogism contribute to the destructive uncertainty, which disguises the spaces of collaboration in the process of market making. The weak procedures are the result of the exclusion of non-specialist and ordinary citizens from the decision-making process to prevent the creation of a collective.

In light of these explanations, I questioned how the market is constituted and what this constitution implies. The dissertation revealed two conclusions. First, the markets are constituted and maintained by uncertainty. The tools of the uncertainty

creation included commodity product (hazelnut), agencies, exchange, prices, rhetorical devices and market policies. Second, the creation of uncertainty reveals the limits of dialogism. These gaps indicate the new ways of thinking about how the market can work and what the new forms of market design would be. The dissertation revealed that the lack of active involvement by ordinary citizens and non-specialists in the market processes results in weak dialogism and destructive uncertainty. By creating a collective, the boundary between representative and those who are represented as well as between specialist and non-specialist may be blurred (Callon, et al. 2009).

The increasing hazelnut production has changed the geography, the local market configuration and power relations. This has influenced not the production of hazelnuts, but also the productions of its exchanges and controversies through rhetorical devices, informal institutions and formal institutions. These productions constitute the process of market making that was analyzed throughout the dissertation. The liberalization process has produced new controversies between the local market forces and the competitive interaction between the formal and informal institutions.

The dissertation did not focus solely on informal networks, formal institutions and power relations. Rather, it examined the implications of the power relations and revealed that the market groups create uncertainties. The uncertainty becomes a tool of market making. The economization of uncertainty provides an analysis on production, calculation and exchange relations through the encounters of market agents through socio-technical controversies. The encounters are symbolized and operationalized through prices, exchange relations and rhetorical devices.

The dissertation chapters are structured on the basis of the key actors of market making; thus, these are the agents who perform the economic activities in different market settings. Chapter 2 provided a policy analysis of the agricultural transformation; thus, the actors are policy makers including international institutions, state, government, and formal institutions that are object of the policies (i.e., producer organizations). The agents of Chapter 3 are hazelnuts as material things, producers, calculative agencies (i.e., formal institutions and experts) and calculative tools that conduct the estimation and calculation of the amount of hazelnut crop and production cost. Chapter 4 examined the interaction between the actors of the local hazelnut exchange, who are intermediaries, grocers, merchants, crackers and brokers as well as exporters and producers. Chapter 5 examined the actors of price making, who are exporters, and their local network actors, importers, Fiskobirlik, and the state with a focus on the interaction between local and global actors. The actors of Chapter 6 included market groups such as producer organizations and business organizations in the analysis of their making of rhetorical devices. Chapter 7 analyzed the formal institutions in their making of policies with a weak degree of dialogism and the rhetorical devices created by the market groups.

The Conclusion chapter is structured in parallel to the research program to examine the “processes of economization” (Çalışkan and Callon, 2009b). The processes include the encounters between goods and calculative agencies; the different price tiers; the formal and informal institutions in market maintenance; and the socio-technical controversies that exclude producers and non-specialist with weak dialogism.

Goods, Agencies and Calculation

As far as the agricultural sector is concerned, the commodity markets are vulnerable to unexpected environmental conditions. The dissertation revealed two basic types of entities, which are material things as calculative tools and goods – hazelnuts; and agencies that involve in the practices of calculation and judgment. The process of material things becoming goods is enabled by the agencies to form expectations and to undertake calculations (Çalışkan and Callon, 2009b). These entities were analyzed in Chapter 3 in terms of calculation and in Chapter 5 in terms of price estimation. These key actors of the construction of estimation and calculation generate diversity and multiplicity, which create disability and asymmetry between unequal agencies.

The market agents are differentiated in terms of their ability to be involved in two spheres, information creation and price formation. First, Chapter 3 revealed that calculative agents produce numbers and reports and that this production is managed by the agencies that are well informed and also who are involved in information creation circles (i.e., Commodity Exchanges). The power of these circles is based on the information and knowledge of which they are aware and the extent to which they are involved in the information production. Within the calculative mechanisms, Chapter 3 concluded that the politics of calculation and the calculation process contributed to the economization of uncertainty. The discrepancy in numbers and manipulation created uncertainty in price estimation.

Second, Chapter 5 analyzed the price formation process as the intersection point of production, calculation and exchange. During the processes, the market agents interact in a complex and competitive manner. However, their capacity to act

is dependent on one another. Therefore, the agencies become disabled in calculating and estimating (i.e., prices, amount of crop). This disability is exemplified with the inaccurate calculation of the amount of the crop in 2009 resulted in the unexpected higher prices for the exporters. The amount of crop was not expected to be realized that much lower than the estimated. Further, the case analyses revealed that this inaccurate calculation also was derived from their expectation of low prices due to the initiation of free market principles. The inaccuracy was derived from the discrepancy between the expectations and the realities. Therefore, uncertainty is economized through expectations.

In light of this analysis, I conclude that the market is made up of two spheres. The first sphere is constituted by agencies that calculate and produce estimations. The calculation of the amount of hazelnut crop is executed by the formal institutions, exporters, importers, experts and the expert commissions (including the representatives of Fiskobirlik, the Chambers of Agriculture, the Commodity Exchanges, the TGB, the Chambers of Industry, and experts). The second sphere is constituted by the agencies that lack calculating competencies. These agencies include informal institutions such as intermediaries, grocers, merchants, crackers and brokers as well as producers.

Chapters 4 and 5 analyzed the asymmetrical relationship between as well as within these two spheres. More importantly, the lack of calculating competencies is not only related to their lack of “the capacity for diagnosis, the interpretation of facts, and the range of solutions” (Callon et al., 2009, p. 34). Rather, it is related to their inability to perform calculations (Çalışkan and Callon, 2009b).

Chapter 3 also depicted the competitive and contested relations within the

commission in terms of conflicting interest in calculating. Calculative agencies generate uncertainties through processes and interactions among agents. A brief study of past statistics revealed that data and information flow are divergent and inconsistent. This is also related to the creation of technical and rhetorical devices in relation to data manipulation, misinformation or disinformation that leads to uncertainty through mistrust and hostility.

The agencies that perform the calculation, in inaccurate, manipulative or speculative ways, contribute to the economization of uncertainty. Uncertainty, in that sense, becomes the tool of market making through calculating hazelnuts, estimating the amount of hazelnut crop, and estimating the prices.

Price Tiers

Chapter 2 explained the increasing hazelnut production areas and the problem of excess supply. However, the excess supply has not lead to a dramatic decrease in prices. The state purchases and power encounters keep the prices within certain limits. The socio-technical controversies as encounters between market groups also result in price maintenance within the certain limits.

The dissertation revealed that, in a given local market setting, the equilibrium of supply and demand forces expects that the prices should remain within a certain interval, limit or margin. Chapter 5 explained how market groups have their own equilibrium expectation and perception. The controversy between the market groups maintains the prices within this *certain* limit. As examined in Chapter 6 and 7, through socio-technical controversies, the equilibrium becomes a tool of negotiation

among the market groups.

The groups interacting within the controversies maintain the price within the so-called equilibrium. The constant search for equilibrium is constructed by creating a common ground between these groups. Before 2006, the controversy on the price equilibrium in the hazelnut market emerged within the perception of threat, suspicion and distrust. Each group fought against each other either for the highest or for the lowest prices, depending on their interests and identities. Each group had its own equilibrium expectation. In the hazelnut market, when the prices reached their highest levels in 2004 and 2005 (in favor of the producers), and when the prices decreased to their lowest level in 2006 (in favor of the exporters), the equilibrium perception turned into the perception of suspicion, threat and thus uncertainty. The increase and decreases in the prices shaped the price struggles and also reconfigured the power relations.

These perceptions re-activated the market groups and changed their interests and evoked the controversies. In 2009, a new equilibrium perception was formed that aimed to provide an average price. This price was expected by the market groups that agreed on a price at around TL 4-5. Despite the fact that there was not a common declaration about this price, during negotiations among the groups, they developed a common ground in the price estimation. During the interviews with these groups, each market actor who had been involved in the controversies within the market groups estimated and expected the free market price as the same. They added the same amount of support payment per kilo (around TL 1.50-2.00) to the same amount of spot price (expected to be TL 2.50-3.00). These were the expectations and price politics through controversies that formed the prices. In the 2009 crop season, these

estimations and calculations on the spot prices were performed inaccurately. The spot prices realized lower than the expected, as the amount of crop became lower. Nevertheless, the creation of common language in price estimation reflected the changing dynamics within the socio-technical controversies.

Therefore, the so-called supply and demand balance is one factor that makes the market actor consider and expect the direction of the price level, whether it is in a decreasing or increasing trend. The main motives of the price makers are historic prices, past experiences and intuitiveness, which generate uncertainties in price formation. Chapter 5 described the process of price formation with a critical analysis of the power relations and strategic contact between and within the local and global. The chapter concluded that the dynamic and changing nature of this interaction shapes the prices. This interaction also shapes the local market in the creation of complex, opaque, complicated and uncertain market processes in light of the changes and ever-shifting power dynamics.

Market prices are formed through simple socio-technical tools such as mobile phones, e-mails, screens displaying commodity prices (i.e., cacao, gold), exchange rates, parities, interest rates, and simple statistics. The hazelnut price tiers are identified to examine the price formation at three different levels. The price tiers include support purchase prices (between 1964 and 2009), forward prices, and spot prices. Each price tier depicts a different configuration of price struggles with the involvement of different actors. The analysis of the price formation processes reveals that the market is a combination of all means of global and local actors who struggle against uncertainties while at the same time constitute and shape these uncertainties. The power is the ability to control and intervene in these uncertainties. Chapter 6 and

7 revealed that the prices become the tools of categorizations and the symbols of each market group in their creation of threat, suspicion and emotions.

Each market agent directly or indirectly has an impact on prices. Support purchase prices are executed by the government and the regulatory agency that purchases hazelnuts on behalf of the state. However, the competing identities and interest of each market group are embodied in the price negotiations. The business and producer groups encounter in price formation. The formation of forward prices points to the interaction between the local and global price setters and market agents. The exporters at the local level and the importers at the global level constitute the global buyers and sellers of hazelnuts. The spot prices are executed by local market actors for the daily exchange between producers, intermediaries, and exporters at the local level. These are the daily prices determined on the first transaction on a given day.

Each price tier is exemplified by three case studies in order to depict the power configuration within each tier and the implication of the interaction between each tier. First, Fiskobirlik's price policy in 2005, on the basis of historic prices, resulted in the highest purchase prices ever in the local market. The hazelnut purchase at high prices led to the bankruptcy of the institution. Its collapse also resulted in the elimination of the regulatory agent in the market. The motive to set high prices is not only to set historic prices, but also to maintain the market power in relation to the identity and interest of Fiskobirlik.

Second, the case of the 2009 crop and price formation similarly showed that the actions of the market actors are based on estimations of the crop level, state actions, and the spot prices. Uncertainty derives from inaccurate estimations that are

based on expectations. The intuitiveness of the exporters also plays a large role in pricing. This intuitiveness may give shape to the market in a way that although an exporter closes a sale in an intuitive way, this price becomes the market price. Also, this market price also becomes a reference price for the following transactions. Nevertheless, intuitiveness does not guarantee that the market prices will remain the same or stay at the desired level.

Third, the case of the hazelnut kings provides insight into the trading relations between global buyers and sellers. The supply and price policies of the global buyers directly affect the local market setting. However, this is not a one-way impact. The struggle of the global seller to maintain its position of being the partner of Ferrero is the other side of this impact. Such a struggle may lead the exporter to decrease its mark-up rates and thus spot prices. The exporters are not flexible in the cost of processing in order to maintain the product quality. Therefore, the market is maintained within the process of the price tiers of forward and spot prices.

Until 2001, the maintenance of the prices also was ensured by the prepayment of Ferrero. In Turkey, following the 2000 and 2001 financial crises, the risky nature of the market led Ferrero to put an end to the prepayment system and eliminate the risky forward. The economic crises reconfigured the power relations within the local market. The collapse of one hazelnut king created a new one in a different market configuration and recovery. Maintenance was replaced by the protection and prepayment of the large exporter, the better prices provided for the intermediaries, and the varied yield measurements. Therefore, the changes in the price and supply policies of the global buyers also were associated with the general economic conjuncture of the country. Besides the country level impacts, the local crises (i.e.,

the 2004 frost, Fiskobirlik's pricing in 2005) replaced forward contracts with bank forwards. Again, such a shift occurred in parallel with the changing banking system in Turkey after the economic crises.

The analysis of price tiers reveals that the different price tiers interact within and between each other; and this interaction reveals encounters and uncertainties. At the local level, the exporters have the power to manipulate the spot prices. However, the manipulation is delimited by a number of factors. These are the low amount of crop, the producer's resistance to sell their produce, and the rhetorical devices created by the market groups. As such, the psychological impacts are significant in terms of the price speculation executed at the beginning of the crop season. During these times, any textual or written expression about the price decrease are met negatively and aggressively in order to eliminate any possibility of a decrease in prices.

The visibility of price formation at the local level and its invisibility at the global level generates a gap between the market groups. Each market group uses different devices to execute its identities and interests. The market groups implement rhetorical devices (i.e., pejorative connotations regarding the exporters). This is a constructed perception on the ground. The invisibility of global market actors constitutes a redefinition of power relations. Power is the ability to determine and to be involved in price formation and price information processes as well as to intervene into uncertainties in these processes. Although the prices seem to be declared by the Commodity Exchanges, the prices are created, formed and shared by the market processes created by price setters and maintained by local networks. The price making reveals competitive and contested encounters, which create

uncertainties. Therefore, each market actor becomes disabled to make estimation in the market.

Furthermore, the perception and expectation on the historic prices in the market making revealed how the markets do not exist as permanent constructs and as single entity. Rather, in each exchange, interaction and encounter, a new form of market making is emerged and reconfigured. As such, the anthropology of price making uncovers different aspects of pricing in which different configuration of power relations and interactions between the market agents are created with diverse expectations and motivations.

Market Maintenance

The maintenance of the hazelnut market requires tools and networks that ensure the regular functioning of the market. The maintenance is the ongoing struggle of the market agents and market groups to survive and to preserve their power positions in the market. Throughout the dissertation, market maintenance was analyzed in the different spheres in which the market agents perform their roles to stay alive. The main actors, who are producer and business groups, produce the tools and networks to maintain their position. As such, they become the actors that maintain the market. For instance, business groups create informal networks, market groups create rhetorical devices. While doing this, both produce uncertainties and asymmetries, and destroy the collaboration between the market agents to create a collective.

The increasing production resulted in profiteers such as merchants and moneylenders who constituted the debt relations between producer, intermediaries,

exporters and importers. During the production and exchange processes on the ground, the producers and intermediaries as well as the intermediaries and exporters interact in informal ways. The informal debt and exchange relations contribute to the market maintenance and to alleviate risks and uncertainties. Chapter 4 revealed that the informal debt and exchange relations maintain the market through informal institutions. The market maintenance through informal means includes price difference in each transaction (i.e., protection by exporters by means of high price provided for intermediaries) and yield measurement (i.e., profit gained over the difference in yield measurement).

In light of the hazelnut exchange through *emanet* or producer *carnet* or yield price, the market is constructed not only on the basis of price formation but also on the basis of exchange relations. The analysis of the exchange relations revealed how uncertainty contributes to the market construction. When the producers leave their *emanet* hazelnuts to the intermediaries, the exchange is completed without setting a certain price. When the producers *give* their hazelnuts to the intermediaries, the yield is not measured accurately and an uncertain yield price is formed. Again, in the first times of TGB, the uncertain market conditions lead the producers to submit their *carnet* to the intermediaries.

The dissertation revealed how the relations between producers and merchants depict a special type of an exchange relation. The producers enter into give and take relations with the certain merchants. Similarly, the merchants enter into the same relations with the producers whom they have known for a long time. This is not a bazaar-style that Geertz (1978) identified, where the exchange form involves non-standardized quality and valuation of goods; hence, the prices are more volatile. In

this kind of bazaar setting, the search for reliable information is the focus of the bazaar and it is difficult for actors to obtain reliable information.

However, in the hazelnut local exchange, buyers and sellers are not free in the sense that the classical economy envisages. The reciprocal relations also affect pricing in such a way that at each transaction a different price and exchange relation are executed. The reciprocity is based on both gift (i.e. debt) and commodity (i.e. hazelnuts) exchange. Although the same design continues, since the 2004 frost, the solidarity between merchants and producers and the trust relations have been damaged.

The positions taken by the exporters depend on a chain system that links them with merchants. There is always liveliness among these local powers in terms of knowledge sharing and information dispersion. The market creates the network and this network shapes the market. Throughout the flow of information, uncertainties also are produced and distributed through these networks. Nevertheless, networking as risk alleviation results also in uncertainties in terms of the information flow and the production of information.

With the case of the Ordu and Giresun marketplaces, Chapter 4 showed that the debt relations and the dynamics of the informal collaboration vary in different local markets. This variation points out the different forms of market setting due to the quality of the good, the configuration of agencies, and the different forms of pricing and controversies.

With the involvement of formal institutions, informal institutions became able to interact and to compete with them. This competition is evaluated as self-defense, related to the development of shared norms of sovereignty and non-interference in

informal institutions. The interaction indicates that the process of market making includes multiplicity and competitive encounters between the market agents. The self-defense of the informal institutions reveals the local resistance against the liberalization and the inapplicability of the neo-liberal market making.

The common characteristic of the informal institutions is that they remain separate from the daily price formation processes. Although none of these intermediaries made any attempt to be involved in the price formation, this signifies the asymmetry and exclusion of the informal institutions and individual producers from the market making process in terms of information and policy creation. Within the debt relations, the producers have become part of the uncertain nature of the price expectation. The uncertain revenue and uncertainty in the next crop season kept the producers from making plans and thinking strategically.

The maintenance of informal networks is based on the charisma of the leading exporter. Chapter 5 analyzed the fragile nature of the networks with a case analysis of Başkan Gıda. The networks relations bring the trust concept. However, market maintenance cannot be delimited to trust and informal networks. The exchange relationships are not necessarily based on trusting conventions; instead, these connections are shaped by trade ethics (i.e., oral promises), daily conversations, as well as constructed uncertainties.

The rhetorical devices also contribute to the maintenance of the market. Market groups categorize each other and attribute symbols to this categorization through stories, forecasts and emotions as well as symbolic meanings (i.e., prices, personalities and power position). In Chapter 6, the Or-Gi concept exemplified the categorization between the market groups. Through the categorizations, emotions are

produced such as hostility, hatred and prejudice to overcome, for instance, an existing threat of price decreases. The rhetorical devices constitute indisputable knowledge created by the formal institutions. The market groups create discussions and strategies against each other to turn unknowns about each other into indisputable knowledge.

Chapter 6 analyzed the 2006 protest and how its dynamics were constituted were analyzed. The analysis revealed that the economization of uncertainty produces rhetorical devices. The rhetorical devices create symbols (i.e., prices) through socio-technical controversies (i.e., calculation, manipulation), and through texts (i.e., numbers, figures, reports, press releases). These devices create social construction through emotions and connotations between the categorized groups. The protest was a socio-technical controversy that embraced the multiplicity of the market agents. Such a multiplicity constitutes market maintenance (i.e., measured action) with the inclusion of producers. After the protest, new controversies emerged within the institutions (i.e., Fiskobirlik's board elections).

The rhetorical devices of the formal institutions that represent their identities remain the same, even though their interests changed. In 2009, when the Hazelnut Strategy was initiated, what the producer groups voted in the National Hazelnut Council were against their identities that they reflected in their rhetorical devices. The behavior of the producer organizations was inconsistent with their identities. Their behavior was based on factors that depended on the conditional thinking of these groups (i.e., the financial difficulties of Fiskobirlik and the release of the restricted budgetary resources of the Chambers of Agriculture).

Socio-Technical Controversies and Weak Dialogism

On the ground, constructed uncertainties make producers unable to be involved in the market processes. The mechanisms that make them unable are the same that create destructive uncertainties. In light of this discrepancy, the dissertation analyzed the process of market making from two perspectives.

First, the spheres of the market making, namely production, calculation, exchange, prices, formal and informal institutions and their rhetorical devices revealed that the market is constituted by uncertainties and uncertainties become the tool of market making. In Chapter 7, the case of the TGB support purchases created uncertainties on the ground due to the unknown purchase policy, pricing and lack of expertise of the TGB in hazelnuts. Due to the gradual purchase and price policies of the TGB, the market was constituted with the spot prices and the producers had to give their hazelnuts to the merchants at spot prices that were lower than the purchase prices.

Second, market making generates destructive uncertainties and the weak degrees of dialogism contribute to this destruction. The degree of dialogism is analyzed with a case study of the constitution of the Hazelnut Strategy in terms of the agencies, their rhetorical devices and the socio-technical controversies. Chapters 6 and 7 examined the limits of dialogism as the formal institutions create destructive uncertainties and exclude the involvement of producers. It was seen that socio-technical controversies with weak degree of dialogism create destructive uncertainties.

The degree of dialogism was analyzed from the perspective of a collective,

which is the collaboration of emergent identities within the market. The socio-technical controversies of the Hazelnut Strategy generated the intensity of the cooperation to compose such a collective. In 2005, the creation of the composition was initiated with the identification of common problem areas. However, throughout the controversies, the lack of diversity and the elimination of the minorities resulted in the power execution of the dominant groups. This monopoly of the established groups weakened the degrees of seriousness and continuity of a collective. Furthermore, the weak control of representativity of the spokespersons was observed in the initiatives of the producer representatives to negotiate the right of the producers after the initiation of the Strategy. Especially, during the length of time in negotiating and changing the law, the producers in the hazelnut villages above 750m remained in uncertainty.

The inclusion of the individual producers was limited by making them reluctant to bring their hazelnuts to the marketplace. Also, they were manipulated by the producer's representatives on TV programs, who were told what to say. Again, the lack of clarity in implementation and the lack of transparency and equality in the access of the producers to information resulted in uncertainty on the ground. Therefore, the role of the producers was delegated by the representatives and the legitimate voice of the market groups (i.e., Chambers of Agriculture). The asymmetry of the procedures between specialist and non-specialist as well as between representatives and those they represent led to the exclusion of ordinary citizens, who remain silent. During the decision making, their voice is discouraged (Callon, et al. 2009). The analysis on the process of market making reveals the drawbacks of the lack of a collective in the market and the limitations of delegative

and dialogic democracies. The dissociation of the producers generates uncertainty and ambiguity in the everyday lives of the producers on the ground.

In light of the classification of the producers in two types, on the one hand, the production conditions of the hazelnut producers are more difficult for those who live in villages at high altitudes, and those who produce hazelnuts as their primary income. On the other hand, those who produce hazelnuts as their secondary income were perceived as touristic farmers, which imply that they are not “real” farmers. Nevertheless, both types of producers have a considerable impact on the market constitution and maintenance. Chapter 5 explained that the spot prices increased due to the reluctance of the producers. The producer’s position affects the market dynamics and prices. The so-called touristic farmers do have an impact on the prices when they put their hazelnuts in *emanet*. Chapter 4 explained the factors of the *emanet* hazelnuts and how these satiate the market at the beginning of the crop season.

Chapter 7 revealed that, despite unknowns, the circulation of the material things such as the producer *carnet* and the TGB’s purchase specifications constituted and maintained the complex process of market making. The controversies, such as the exclusion of Fiskobirlik and the late price declaration of TGB made the process unable to be managed by the primary producers.

The role of the producers is also disguised within the competition between formal and informal institutions in terms of two perspectives. These are the transformation of the producer cooperatives (i.e., Fiskobirlik) and the weakening debt relations, as a result of the crisis (i.e., the 2004 frost, the debt crisis). Therefore, these developments impact the producer’s interaction with the formal and informal

institutions. The elimination of regulatory agencies (i.e., Fiskobirlik and the TGB) excludes the producers from the market sphere. Their traumatic reactions against the removal of state support were not embodied in a collective reaction, as they were excluded from the policy making processes. This was the trauma of being left unprotected by the state. The producers perceive themselves as having been abandoned by the state; and convicted by the merchants (i.e., free market price, debts to merchants).

This exclusion directed them to the private banks for credit financing. However, the producers were unable to pay the principal payment and thus their debts continue. The debt relations of the producers to the merchants have a temporary character, similar to bank financing. Since the producers cannot not sell their hazelnuts immediately (due to the processes of picking, drying, and sorting), they have to borrow money. Especially, in the cases of money borrowed from merchants, the hazelnut earnings of the producers – in particular small-scale producers – become insufficient to support living for the entire year, as they had brought their hazelnuts to the merchant in return for the borrowed money. Such a temporary living creates uncertainties (i.e., the lack of infrastructure in high land villages, the decrease in livestock farming, unemployment and temporary employment, and changing consumption habits and urbanized village life in the central villages).

The producers experience uncertainty in terms of the production, exchange and price conditions. They went into a panic when they heard that there would be no more state support for hazelnut production. They asked, “What will happen to us if there is no institution (regulatory agency like the TGB) to buy our hazelnuts? How

will our children establish their own homes? There are no job opportunities.” The loyalty of the producer to their lands and the family ties became the tools to overcome uncertainties. Family members living in the big cities provide money cash to other family members producing hazelnuts. Sharecropping is another tool of land loyalty.

The above-mentioned dynamics were analyzed in Chapter 3 and Chapter 7. These chapters revealed two types of uncertainties with which the producers have to cope: radical and constructed uncertainties. Radical uncertainty is related to environmental conditions, unemployment and changing village life. The position of the producers is not related to the unknowns about the crop level, production conditions or exchange relations. Every producer has technical and daily information on hazelnuts, their condition in a given crop season and thus production and exchange conditions. However, the constructed uncertainty (i.e., manipulation, speculation and rhetorical devices) renders the producers disabled. The constructed uncertainty is related to the controversies between market groups and the exclusion of the ordinary citizens from the decision-making processes.

Disabled Neoliberal Policies

Since the 2000s, the process of market making has been shaped through the market reform policies, the reconfiguration of local power forces and new socio-technical controversies as well as environmental risk in hazelnut production. The market reform policies redefined the roles of the market agents and envisaged a new space in which the market agents have specific characteristics to perform their roles assigned

by the reform projects.

The state has played the role to create and preserve the institutional framework appropriate to reform policies. However, the local market forces have not adopted the roles as they were envisaged. The defense mechanism has generated socio-technical controversies.

Chapter 2 provided a policy overview of the agricultural transformation by probing its dynamics, contradictions and struggles. The characteristics of the local market forces created a different process of liberalization. The Chambers of Agriculture were powerful institutions in terms of creating, reaching and manipulating information. Fiskobirlik was powerful in terms of its structure, which was based on the election of the delegates, its organic relationship with the producers and its power to execute hazelnut prices. Between 2002 and 2006, the election process of Fiskobirlik depicted the resistance on the ground. These very local characteristics of the Chamber of Agriculture and Fiskobirlik differentiated the hazelnut market from other product markets.

Moreover, the hazelnut market lacked the lobbying force of global companies. The global importers did not interact with the politicians in a direct manner to affect the policies. The strategic partnership between the exporter and importer contributes to this market character, which resulted in such a different process of market reconfiguration during the liberalization process. As such, the local market forces created different types of controversies as compared to other product groups, such as tobacco and sugar. However, the attempt of global market actors (i.e., Ferrero) to enter the local market directly may lead to sub-contracting, the loyalty to land might be damaged and the main mechanism of resistance might collapse.

The analysis on the liberalization process of the hazelnut market revealed that the procedures and implementation of support programs create market distortions. The liberalization process has not resulted in the creation of viable institutions (i.e., producer organizations) with the aim to remove so-called unsustainable and distortionary system of subsidies. However, the study of how the market is constituted revealed that the socio-technical controversies and competing interests create uncertainties. The liberalization projects proposed a clear line between society and market. However, the analysis of the making of the market disclosed that the search for perfect markets is not viable in the market constitution. Distortions are the nature of these controversies that need to create a collective. What distorts the market is rhetorical devices created by the market groups.

In 2009, state intervention was brought to an end by law, and, for three years between 2010 and 2012, the producers with hazelnut farmer's certificates were provided support payments. Considering the end of the direct support payments in 2012, one might ask the following: What are the new mechanisms of the market constitution after the end of state intervention and support? How is the market to be reconfigured in terms of production (i.e., the The Model of Agricultural Districts Production and Support), exchange (i.e., license warehouses) and price formation (i.e., commodity exchange, free market)? What are new controversies in this configuration?

New Knowledge, New Reconfiguration and Market Collective

With the analysis on the processes of market making, the dissertation revealed new forms to allow the producers to be included in these processes. What are the new spaces of strong dialogism? How do the market agents collaborate and create a collective? The concept of composition (i.e., composition of singularities) is different from the concept of aggregation (i.e., aggregation of individual wills). Therefore, in the space of organized hybrid forums, the composition is created by collective learning. A collective “produces new knowledge and new social configurations” that create micro-decisions that are not final decisions that are subject to change in relation to the inclusion of new identities and interests (Callon, et al. 2009, p. 10).

The creation of focus groups might enrich the degrees of dialogism and makes the processes more intense in terms of cooperation, as well as more diverse, equal and transparent with the serious and continuous participation of the non-specialists and ordinary citizens. Further, with the creation of multiple identities and their constant redefinition, the spokesperson might perform stronger representativity. With the active involvement of non-specialists and ordinary citizens, the rules of implementation might become clearer to eliminate uncertainties. The strong degree of dialogism might remove the gap between the process of decision making and the process of communication and implementation. Further research might contribute with new forms of market setting to fill these gaps to eliminate uncertainties.

Two points of references might be significant to initiating the creation of hybrid forums. First, new agencies may imply the village headmen. The producers consult the village headmen in terms of production, credit options of private banks,

market information and communication. The village headmen are the key agents in this process to become the intermediary actors in the collaboration between specialist and non-specialist as well as between representatives and those who represent.

Second, the case of the Keşap Hazelnut Producer Organization signifies the necessity of extending the scope of these organizations in order to increase the spaces of the producer collectives. The lack of sales and marketing activities of these organizations is the primary obstacle to expanding these initiatives. Therefore, rather than assigning only technical duties to these organizations, the creation of a collective might allow the inclusion of the producers in the price and exchange processes. The development of producer organizations does not create market distortions unless they are created within the scope of the market collective. Since the producers are represented mainly by the Chambers of Agriculture, the process of market making becomes contested. However, the emergence and consideration of new groups and identities eliminate the contentious perception of the market making.

Similarly, the activities of the Union of Hazelnut pointed out the necessity to create the hybrid forums that involve the multiplicity, minorities and diversity of interests to prevent inefficient controversies realized in different time and spaces by different groups who have different degrees of influence. This is a situation, which creates productive uncertainty.

According to Callon et al. (2009, p. 14), “to overcome the mistrust against the institutions, hybrid forums create space for their exclusion.” This is identified as the “democratization of the democracy” (p. 135) by liberalizing the markets to facilitate the expression of views to organize hybrid forums and to enable effectiveness. The dissertation, with the analysis of the economization process of uncertainty, revealed

the limits of the creation of a market collective and opens the discussion to the creation of new forms of market setting in light of the limitations.

Although we are in a constant struggle to understand the markets and assume that all we need to identify are unknowns and risk, what we should do is to explore the constitutive role of uncertainty in the market making. The dissertation analyzed uncertainty as the destructive outcome of the complex processes of market making, and discusses the limitations that are revealed through these processes.

In light of understanding these limitations, a new configuration of market setting would be possible with the inclusion of new knowledge, new identities, and new interests to create collaboration between the agents of the market making. This is why it is important to understand the limitations of creating a market collective. Beyond the limited categorizations, the market would become the public arena that generates productive uncertainties with the emergence of micro-decisions that are revealed in the creation of a collective on the way to include small groups. This is what gives market agents the ability to interfere in unknowns, but not at the expense of minorities who are small and unorganized producers.

APPENDIX: QUOTES IN TURKISH

1:

“Benim kooperatifimde 200 alacaklı var toplam 6,5 trilyon, nerede bunlar? Vatandaş kooperatifçilik mantığından uzaklaştırılıyor, amaçlarının gerçekleşmeyeceğini anlamalarından kaynaklanıyor. Bir tür turistik çiftçilik. Fındık hiçbir zaman birincil geçim kaynağı olmadı. Üreticiler ya bordrolu, ya emekli ya da esnaf. %10 birincil denilebilir.”

2:

“17 kişi geliyor, 1 aşçı (1,5 alıyor), 1 çuvalcı (1,5 alıyor), 1 ekipbaşı (çift alıyor). Daldan 14 kişi koparıyor, 13 günde bitirdi. Kişi başı 1 lira yazılmış. 5-6 ton bu sene, geçen sene 1,5 ton, 16 milyar [16.000 TL] verdim, 60 dönüm, 2 kız kardeşim var. İşçi için 4,5 milyar, gübre için 5,5 ton (500'den) 2,5 milyar, temizlik 27 gün kendim yaptım, işçi tutsaydım $130 \times 27 = 3,5$ milyar tutardı. Bunun patozu, nakliye vs.”

3:

“Valinin açıkladığı 23 lira bizim için, 40 lira yerli işçi için. Doğudan geldiğimiz için az veriyorlar, düşman görüyorlar bizi. Kilo başı üzerindendi daha önce, 2-3 sene önce, ama çuvala toprak-taş koyuyorlardı. 15 dünde bir banyo alıyoruz, 1 odada 15 kişi kalıyoruz, 4-5 sene Ziraat Odasıyla geldik sonra dedim biraz ben para kazanayım, ben minibüsle geliyorum ... Sadece makarna yiyoruz.”

4:

“Gecikmiş bir karar, 15 yıldır bu sınırlamalar getirilmedi. Üretim artıyor, fiyat düşüyor. AB doğrultusunda serbest piyasaya bıraktı. 3-3,5 TL satış sunulabilir, destekle beraber, 4-4,5 olurdu. Ama fındığın çok olduğu zaman ne olacak? Giresun-

Trabzon-Ordu için iyi bir karar ama şu anda değil.”

5:

“462 bin ton rekolte tahmini var 2009 ürünü için, bu yıl fiyat 3-3,5 olabilir, ama geçen senenki gibi rekolte olursa? Bildiğimiz hiçbir şey yok, 4 büyük alıcı var. Herkes şaşkın, tüccar ne verecek diye düşüncede, 1 lira dese serbest piyasada. Yevmiye 23 lira belirlendi Ordu valiliğinde ama kimse 30’un altına çalışmaz.”

6:

“Eskiden paramızı alıyorduk, paramız oluyordu. Ama şimdi oğlun var evlenecek kızın var kocaya gidecek, bunlar borçla yapılıyor. 69 yaşındayım, babam 1367’liydi, babama sordum baba bu fındık ne zaman dikildi, ‘oğlum ben de sordum ama babamım babası anca bilirmiş dedi’ hesap et. Yıllarca Fiskobirlik’ye fındık verdik ama paramızı alamadık, canımız yanmış, ne yapacağız, bir baba evladını kapıya atar mı? Atmaz. Hükümetten destek istiyoruz, yardımcı olsun, ne yapacağız? TMO da yok. Daha önce TMO’ya şöyle verdim, götürdüm, çürük dediler, sonra evde de tutamam sonra bir daha götürdüm sonra rüşvetle aldılar, niye böyle oluyor? Bir komşum Fiskobirlik’e fındık verdi, 4 senedir alamıyor parasını. Tüccar bizim anamızı ağlattı, tüccar alabildiğine şey yapacak [bastırarak]. Piyasayı serbest bıraktılar, bu kaç seneden beri alınan bir karar, bu sene şey ettiler [gerçekleştirdiler]. Bahçeye destek verecekler ama onu da bu sene vermeyecekler. Söküm olmaz, burada başka bir şey yapamazsın, başka ürün gelmez, kivi olur ama pazarı yok. Fındığı 2 sene sakla bir şey olmuyor, kiviye 5 ay elinde tutamazsın çürür.”

7:

“Fiskobirlik’e güvenimiz kalmadı, sürekli tahhütte bulunduğu ‘fındık alacağız, ödeyeceğiz’, hala 2006’da ödenmemişi var. Şekerbank’a var, bize daha yazı [banka

borç yazısı] gelmedi. Fiskobirlik burada Şekerbank'la anlaştı, 'paranın bir kısmını alacaksınız'. Giresun'da alamadık, geç kaldık, 'Çarşamba'ya gideceksiniz sıraya girip, liste astılar, otobüs tuttular, 1 kefil, eniştemle gittim, bomboş kağıda imza attık. İmzalamazsan alamazsın dediler. 4.100 TL almıştım, [faiziyle] 5.200 TL'ye çıktı, ödemezse ben ödeyecekmişim. 1 hafta sonra, Fiskobirlik ödemezse, dedikodu gibi ama kesinlikle öder dediler. Fiskobirlik yönetimi AKP ile ters düşmüş, TMO geldi, TMO'dan sonrası, Fiskobirlik almayacak, anonim şirketler kurulacak, üreticiyi birbirine düşürdü, bunu da bilerek yaptılar ... Daha önceleri güven destek vardı, hiç faizsiz un, kumanya gibi küçük esnaftan veresiye alıyorduk. Ama fındığın ne olacağı belli değil, korkuyoruz.”

8:

“İlk defa bu sene fazla para aldım, onunla da nişan yaptım. Durumlar çok kritik, fındık olur mu olmaz mı ama yine de almam gerekir nişan, kız, oğlan evlendirirken. 7 ayda aldım borcu. Fazla [faiz] almaz fındığı verdiğim için, 4-5 senedir ama daha önce 1-2 kere Ordu'da tüccardan amele parası alıyorduk, faizli olmuyor, 8. ayda alınınca tabi fındığın fiyatından kırıyorlar.”

9:

“56 yaşındayım, 2 oğlum çalışıyor, kızım ev hanımı İstanbul'da. Biz de kışın yanına gidiyoruz. Mesleğim çiftçi, SSK emekliliğine 1 sene kaldı, 8. ayda, gazi maaşı alıyorum. Müşterek/hisseli tapum var. Toplam 30 dönüm, 4 erkeğe bölündü, bana düşen tapu 8 dönümlük. Kızlar almadı, yoksa anneye birlikte 12'ye bölünür, babam ölmeden 4 kardeşe vermişler. Kızlara da harçlık gibi gönlünden kopan bir para verdiler. İstanbul'dan çocukları getirdim, 750 lira otobüs masrafı oldu. 750 lira da yevmiye parası. Kürtler geldi. Onlar, akrabasının orada kalıyorlar. 2 gün aldım o

sürede bahçede çadırda kaldılar. İyi topluyorlar, işte mecbur [onları alıyoruz], adam olmayınca ... Tarım Kredi Kooperatifi'nden 3.000 TL gübre kredisi aldım, faiziyle 5.000 TL'ye çıkıyor, 6-7 sene önce ev yaptırırken almıştım, sonra almadım. Kredi kartı kullanmıyorum, yeğenim üzerine kredi çektim. Gübre vs. peşin alıyorum. Oğlum ve gelinim aynı evde oturuyoruz.”

10:

- Nevzat'ın yerini düz gösterelim
- Açık alan ne gözüküyor?
- Tapuda fındık gözüküyor.
- Gözükemez fındık olarak.
- Ama öyle görünüyor.
- Açık alan fındık gözükmez uyduda
- Orayı beyannamede yazmayın riskli bizi de yakarsınız, uyduda açık görünüyor.

- Alt taraf 2B, ne zaman dikildiğini bilmiyorum, üst taraf tapulu, ne zaman dikildiğini bilmiyorum, nasıl iş? Kadastroda 1981'de bilirkışı hatası var.

- Fındık olduğunu iddia edenlere 'burası açık' diyeceğiz.

11:

- Ziraat Odası Temsilcisi: Mitingi biz yaptık, onlar prim aldı ... Fındığı haşerelerden koruyoruz ama iki bacaklılardan koruyamıyoruz ... [Borsa ve ihracatçılar birliği yetkililerini göstererek] Bizi sömürenler bunlar.

- Ticaret Borsası Tetkilisi: Fiskobirlik yetkilisini işaret ederek “sizi bu bitirdi”.

- Fiskobirlik Yetkilisi: 5 gündür iyiydik ne oldu? İnsanlarla konuştuk, tartıştık siyasi eğilimlerini anladık.

Ziraat Odası Temsilcisi: Burada TMO'dan kimse yok o yüzden Fiskobirlik rahat.

12:

“Dal sayısının 390 olması çok yüksek, eski formüllerde 250 alınıyordu. 6-8'den aşağı dal yok, 65 ocak x 6 dal= 390 dal çok ama 300 yazsak rekolte 90 geliyor, bu da çok. Görünmeyen meyve sayısı 1025, çotanaktaki fındık sayısı geçen sene 2,7'ydi, dal sayısı 250'ydi, kg'a düşen fındık sayısı 600'dü. Döküm oranı, sahil kesiminde %10, orta kesimde %20, yüksek kesimde %25, ortalama %15 oluyor zaten.”

13:

- Öğretim Üyesi: Ortalama sayıları her sene çalışıyorum, eski sayılar değil elimdekiler, bu sayılar arazi çalışmalarımından elde ettiğim veriler.

- Uzman: Sana inanırım! Fakat Fındık Araştırma Enstitüsü'ne inanmam.

- Ticaret Borsası Yetkilisi: Geçen seneki fındığa göre 600 doğru sayı değildi ben 650 olması gerektiğini söyledim ama neyse bu seneki normal.

- M.Ş: 550'ye bir kilo atıyorum.

- Ticaret Borsası Yetkilisi: O tarafta olur, Tirebolu, Görele... ama yüksekte zor.

- Uzman: Aslında Eylül ve Nisandaki durum %30 fark eder, kilosunu açısından, iç kendini toparlıyor, çekiyor. Bu bilgileri izlemek gerek.

- Ticaret Borsası Yetkilisi: sistematığı yok.

14:

- Öğretim Üyesi: 2,4 çotanaktaki sağlam fındık sayısı, fakat benim sayımda 3,4 çıkıyor, yine de 2,4 bence uygun, % 15 de döküm olacak. 600 kg'a düşen fındık sayısı. Rekolte 76.273 çıkıyor. Alan 1.017.272. 250 dal sayısını 270'e çıkardık, ocak

sayısını 55'e indirdik.

- Ticaret Borsası Yetkilisi: 600'den hesap etsek, $6 \times 600 = 360$ çok yüksek oluyor, 300 dal aslında, 55 bence az.

- Expert: Biz zaten tahmin etmiştik.

15:

- Ticaret Borsası Yetkilisi: Peki, alanda da sıkıntı var, Çiftçi Kayıt Sistemi kayıtlarına göre yapılıyor. Tarım Bakanlığının Inta SpaceTurk raporu elinde, başka kimsede yok. Bu rapora göre, 117.800, ama biz hala Çiftçi Kayıt Sistemi kullanıyoruz, buna göre de 100.000 hektar. Üretim alanları arasında fark düşünüldüğünde $117 \times 76 / 100 = 8.9$ ton, 10.000tonluk fark Giresun için ne demek oluyor? Bu fark bir ilin 3 aylık giriş çıkışı.

- Uzman: Rapor 14 kadar legal / illegal alan tanımlıyor, 17 bini orman ve 0-6'nın altı kayıtlı olmayanlar sayılabilir.

- Memur: Benim kayıtlarıma göre üretim alanı 120.720 hektar,

- Uzman: (ÇKS'yi kastederek) Doğru olan veri bu, resmi olan doğru bu.

- Ticaret Borsası Yetkilisi: Ben katılmıyorum. Bakanlık bu raporu hazırlıyor ama biz uygulamıyoruz!

- Memur: Bu rapor bize de gönderilmedi.

- Uzman: Demek hala art niyetliler.

- Ziraat Odası Yetkilisi: Rapor Ziya'ya [Ticaret Borsası Yetkilisi] ulaşıyor, Tarım Bakanlığının koluna ulaşmıyor, bu garip değil mi?

- Ticaret Borsası Yetkilisi: Biz alanı oturtamadığımız için rekolte ile oluşan fark çok, X kadar alan var diyoruz rekolteyi Y tahmin ediyoruz; her sene X artıyor.

16:

“Üretici manav ya da aracından borç alırken ürününü başkasında satabiliyor. Büyük ihracatçılar, manavlara para verirdi, örneğin 100 milyar. Manavlar da bunu 5-10-20 köylüye dağıtırdı. Köylü emanet sistemindeki güveni bitirdi. Söz verdiği manava, tüccara değil, başkasına vermeye başladı.”

17:

“Buralarda randıman 57-58’dir, buralarda randıman yüksek o yüzden köylüler randımansız satmıyor. Randıman kırma yok burada. 1 ton getirdiyse, her çuvaldan 1 avuç alınır. 1 randıman vergiye gider, “ama siz köylüye söylemeyin böyle”. 52-53 geliyor çoğunca. Randımanlı vermek köylü için iyi değil. Sakat adamı biliyoruz, köylere gidiyoruz, herkesi biliyoruz. Fındık karşılığı para veriyoruz.”

18:

“38 senedir bu işi yapıyoruz. Çevremiz geniş. Verdiğim borçlar değişiyor. 100 TL de olabiliyor 5,000 TL senetli de olabiliyor. Faiz yok. Bugün 4 lira. Yine aynı 4 lira. Geri alamadığım olmadı. 100 lira sadece. Tanıyorum. Muhidime veriyorum. Bana yanlışlık yapan evine gelemez, sat ineğini bana para ver. Batanlar üçkağıtçı, senden benden alıyor başka yere veriyor. Geçen sene fındık ucuz oldu bastı borç vermişti, faizli, Mayıs’tan bu yana B. ve G.’da batanlar oldu. Çoğu geri ödeyemedi”

19:

“45 yaşındayım, bu zamana kadar çok faiz yedim, artık namazında niyazındayım çok günah işlediğimi anladım, artık faizli çalışmıyorum. Fabrikadan, bankadan % 2 kullanırız, işçisi, vergisi banka faizini geçmemeye çalışırız. %2-2,5. Artık bıraktım. Bu işi de bitireceğim, faiz yok bundan sonra, borcu donduracağım. Bereketi olmadığını anladım. [Faizin]Allah katında çok günah olduğunu öğrendim. 5’ten

başlar, parayı 2'ye alır. Köylüye 5-7'ye satar, bu köylü nasıl çıkar işin içinden? ...
150 müşterim var, o arkadaşlar [batanlar] meslektaşım, 150'nin 40'ı çürük çıksa iflas eder. Köylüden olmadı fabrikacıya borçlandı, borcu geri getirmede üretici ...
Yükseğin fındığını aldık, satamadık ... Fabrikatöre bir şey olmaz, olan bize, köylüye oluyor. [TMO] Bu sene alayım deseydi, köylüyü de bizi de çok rahatlatırdı.”

20:

“Satamam diye bir şey yok, anında paraya çevirebileceğiniz bir şey fındık.
Bankaların biraz üstünde faiz uyguluyoruz, %3-4'ten veriyorduk, ya da \$ verip \$ alıyorduk; € verip € alıyorduk, artık bunun da bir mantığı kalmıyor. Verdiklerimizi geri alamıyoruz. Para verilmediğinde daha huzurlu olacağını düşünüyorum ...
Verdiğimizden %40 alacağımız var. Borcu üreticinin geiterebileceği fındığın yarısı için veriyoruz. 5 ton ise günlük fiyat ile çarpıp bunun yarısını borç olarak veriyoruz. Eğer üretici yarısından fazlasını istiyorsa üreticinin gücüne göre; mal varlığı var ise teminat alınıyor. Eğer tanıyorsak ve kefil varsa sözle deftere işliyoruz. Sıkıntı olacağını düşünürsak hiç vermiyoruz. Tanıyorsak, güveniyorsak tamam, yoksa teminat ya da gayrimenkul gösteriyorlar. Bankalarda da tarım kredisi veriyor fakat biz borç vermeyince bankalar ipotekle veriyor. Köylümüz olursa ona çevre köylerde birbirini tanıyor, kefil oluyorlar birbirlerine, tanımadığımızı para vermiyoruz. Ama bunun da bir mantığı kalmadı.”

21:

“Borcu, bildiğim kişilere harçlık olarak veririz, faizi ise ziraatın [Ziraat Bank] ötesine geçmez. Hangi köy ne kadar fındık yapar ne olduğunu biliriz. Vurgun da yiyoruz, [vurgun] her sene artıyor. Mahsul olmaz bekletirsin, mahsul olunca kanuna, senete tabi yoksa alıp gider. Yılsonu borcu kesmek mecburiyetindeyiz ama arkadaşlar var

idare etmesini biliyorlar, kesmiyorlar. Temmuz 15'te borcun kesilmesi gerek, dün mesela 'benim fındığım olduğunu kimseye söyleme' diye bir köylü kadın gelmiş.”

22:

“Herkesin bir tüccarı vardır. Faiz sorma hesabı yok. Tüccar istediği gibi açık senet yazdı yıllarca. 2004'te 6-7 lira olan tüccarlar borçlarını o zaman sildi. Özel bankalar kredisi ziraatinkine göre yüksek olmasına rağmen sadece para satan tefeciler de vardı. Çok canlar yandı. 3 sene önce Ulubey'de baba oğlu, tüccardı, vurdular. Fındıkta uzun yıllardır içindeyim, hafızamı yokladığımda aklıma neler geliyor. Fındıkta kazanç çok iyiydi. Üreticinin ne kadar arazisi var, fındığı var biliyor, ona göre parayı veriyor.”

23:

“21 senedir bu sektördeyim. 3 senedir buradayım, hiç fabrikaya borçlanmadım. Ayrıca kömür, inşaat işleri yapıyorum. Fındık fiyatı 4.2 iken 4'ün altına inince benim de üreticinin de canı çıkıyor. Köylüye bir haciz getirmedim. Borcunu ödeyemedi ama ben 3-5, 10 sene dondurup faizini almıyorum. Tarihlere bakalım mesela, [borç defterini çıkarıyor]. Bak 11. ayda para almış, hasatın hemen bitişinde, tam parası olması gereken zamanda. 10 dairem var onlar [üreticiler] sayesinde. Düğünü, hastası, cenazesi olduğunda karşılıksız, müşterimizi zor durumda bırakmayız. Faizsiz. 4. ve 5 ayda en yoğun [borçlanma] başlar, fındığa girene kadar bize kalır, patoz parasını, 100-150, bile biliriz.”

24:

- “Tüccar geldi aldı, daha önceki gibi, 5-6 senedir aynı, dostluk, arkadaşlık abimin arkadaşı. Geçen sene yarısını TMO'ya 4,70 liradan Aralık'ta verdik; diğer yarısını tüccara para aldığımız için, Eylül'de 2,70'den verdik. Bu sene, tüccardan

biraz para almıştık tüccar bizi idare edene kadar tutmaya çalışacağız. Keselim derse keseriz, para verdiyse hemen fiyatını keser.”

- “İhracatçının olduğu yere çiftçi güvenmez”

- “Tüccar, tanışsa güvenirim. %60’ı ya kantardan çalar ya da randımandan.”

- “Tüccar köklü bir manav. Entegreler en büyük düşman.”

25:

“16 saat yol kestik, cenaze, ölüm oldu, Emniyet Müdürü görevden alındı. 5-6 ay sonra 4 milletvekili iken 5 milletvekili oldu. Jop yedim. Alın terimizin karşılığını isterken terörist olduk. Yolu açtı, tüneli açtı sonra. Tayyip Erdoğan Ordu’da ‘bana mı verdiniz, FKB’ye gidin’ dedi, fiyat 4’ten 2’ye indi. Ama ben size oy verdim ... Manisa mitingine 4 otobüs gittik, onların ürünü de para etmiyordu. Biraz bunlar da etkili oldu. Oradaki kalabalık Ordu’nu öz insanı değildi, muhalefet bile sahip çıkmadı. Emniyet Müdürü yolu açın dese linç ederlerdi. Gazetede yazıyordu Giresun jandarmadan takviye gelmişti, gelir tabi 120 bin kişinin önünde durma şansın var mı?”

26:

“Ticaret grubu fındığın 3 milyon liraya oturtturmak istiyor, üretici olarak biz de 4 ile 5 arasında bir fiyat oluşmasını sağlamayı istiyoruz. Şimdi bunun mücadelesini vereceğiz 3 ayda. Ticaret grubu 3’te oluşması için tüm argümanlarını kullanacak bizler de 4 ile 5 arasında satabilmek için toplantılar yapıyoruz, televizyon programları ayarlıyoruz. VTR’ler hazırlıyoruz, Ağustos’un 20’sinden sonra piyasa savaşları başlayacak burada.”

27:

“Serbest piyasayla Hasan amca pazara inecek tüccara gidecek, ne kadar 1 lira, ne kadar 1 lira ... Biz bu açıklamayı geçen hafta pazartesi Salı hazırladık sonra borsadaki fiyatlar 4’ten 3’e düştü ... Bizim görüşümüz alınmamıştır ... Bunu mutfağı belli, gazetelerdeki reklamları gördük.”

28:

“Ben toplamam, nasıl? Olamaz! Seneler önce toplamadan önce fiyat verilirdi, deme?!, Vermem! Paramı, alın terimi döktüm, veremem. Amele kendine fındık topluyor, üründen para kazanmıyorum.”

29:

“Emanete bırakmıyorum, eskinden Fiskobirlik vardı, 3 senedir TMO var. TMO’dan gün alıyorduk, 1-2 ay evde saklıyorduk. Geçen sene 5 ton, bu sene 1,5 ton fındık var, evimizde, dükkanımızda saklayıp satacağız. Bu sene 4,5, seneye 5 olur, [fiyat] geri gelmez. TMO’nun mutlaka [fiyat] açıklaması lazım ama. Yoksa çok zor olur. Yevmiye 23 lira açıklandı, ama 35’ten aşağı kimseyi çalıştıramazsın.”

30:

Türkiye için kazanma vakti; Fındıkta ne devlet ne ihracatçı, ne üretici ne tüketici kimse memnun değil; Kimse kazanmıyor; Kendi paramızla düze ovaya fındık diktik; Alternatif ürünlere yer bırakmadık, çeşitten olduk büyük zarar ettik; Dünyanın talebinden daha fazlasını ürettiğimiz yetmezmiş gibi rakip ülkeleri fındık dikmeye teşvik ettik; Üreticinin destekleneceği, tüketicinin ve Türkiye’nin kazanacağı bir sistem mümkün, Haydi ... Yapalım! Sağlığınız için her gün bir avuç fındık yiyin.

31:

“Toplantının amacı, üreticimizi bilgilendirmek, yeni strateji ve metotlar sunmak. Yasanın uygulanması ile ilgili, biz 1. Standart Bölge’deyiz. Türkiye 30 havzaya bölündü, 186 ürün deseni. Biz Karadeniz’de 19. havzadayız, bunu iyi bilin, Ordu ve Giresun, fındık havzasında, 750 rakımın üstü ve %6 eğimin altında fındık üretilmeyecek. 750 üstündekileri zaten 2006’dan beri almıyorduk. Bakın 2006’dan bu yana söylüyorduk 2009’da gerçekleşti!”

32:

“Sokakta konuşulanlara bakmayın ... Giresun genelinde 100 bin hektar civarında alan var bunun 17 bini illegal. Rekolteyi tam tespit edebildiysek 76 bin ton, yani 1 dönüm alandan 76 kilo, bunu unutmayın bunu baz alacağız, geçen sene bu 120 kiloydu. Giresun olarak dönüm başına 120 kilo fındık üretemedik, Terme’de 225, Çarşamba’da 230, Düzce’de 186’ya kadar çıktı. Ordu bizden düşük, bu alanlarda en iyi üretim sağlayan Keşap ... Hükümet- devlet stratejisini değiştirmek mümkün değil. Şimdi biz ne yapacağız? Bir konsept vereceğiz, doğrudan yönlendirmeliyiz, başkalarından bilgi almamalıyız, biz başkalarından farklıyız ... Şimdi, Pazar işi var, TMO çıkınca. Üretimi hallettik, rakım ne olursa olsun fındık yapan her yerde aynı. Erol, Fikret [sesleniyor]. Kalkın. Bu sene bunların üretimi geçen senekinden fazla, 300 civarında. Periozidite var diyenler nerde? 1 yıl verir 1 yıl vermez diyorlar. Gelin benim üreticime bakın [Seslendiği birkaç üreticiyi ayağa kaldırıyor], oturduğunuz yerden yazmayın. Tamam oturun.”

33:

“Strateji Giresun’un doğrudan olumlu etkileyecek. Hemen değil, 3 yıl sonra [alanların sınırlanacağını öngörerek], Ordu-Giresun ıslık çalarak fındık satacak. 76

bin kilo üretimimiz var, 150 TL destek ile birlikte, 150 TL kilo başına 2 TL'ye denk geliyor, bu da fındık pazara inmeden 2 TL'yi görüyor, pazarda da 3'e satarsak, fiya 5 oluyor ... eğer 4'e satarsak, 5 oluyor.”

34:

“Biz tüzüğe göre, birlik yönetimi eliyle satacağız. 1 yerde bekletsek, 1 depo kiralsak, sigortalasak. Ben hem Akdeniz İhracatçılar Birliği hem Borsa hem de UFK yönetim kurulundayım. Bir yolunu bulmaya çalışacağız. Fındığın kaliteli olması lazım, TMO'ya verecekmiş gibi hazırlamalıyız, nemi, aflatoksini vs. ... Sertifika veren ECAS, Migros'un Türkiye genelindeki mağazalarında, çiftçi denetimi sözleşme yaptı. Pazar var, Migros'la anlaşırız, gıda güvenliği, üretim sertifikası sağlarız. Kırmak, paketlemek, bandrol, marka sağlayalım. Bunlar üzerinde yoğunlaşalım, kapı arkasında karar alıp size duyurmuyoruz biz. Nasıl değerlendirir, tek elden nasıl satılır? Keşap markası nasıl yaratırız, gıda güvenliği ile Pazar boyutunda önerileri olan var mı?”

35:

“Fındıkta borcunuz varsa o kadarını verin, gerisini bırakın, kredi (Tarım kredileri) kullananlar var biliyorum, Ekim'de ödemeleri var, onlar belki bir miktar satış yapabilirler. Mücadele verelim, alın terimizi daha iyi fiyattan satalım. Üretim artsın, kalite artsın, gıda güvenliği sertifikalarımızı alalım. Pazara direneceğiz. Piyasadan güçlüyüz.”

36:

“Yüksek köylerde asla zorlama yok, 3 yıl içerisinde 600 lira destek ile sökülecek, ama bu destek söküme bile yetmez. Ankara'daki için 24 milyar çok para gibi görülebilir ama bu masraflar için az. Fındık fiyatı için 6,96 dedik bize güldüler,

millet cümbüş bayram eder. Devlet ilk defa fındık fiyatı açıklamadı. Az olur çok olur devlet fiyat açıklar, tüccar hizaya gelir, tüccara teslim ediyorsa devlet olarak koruyacağım demeli. Söküme karşı nasıl direnç gösterelim?”

37:

“5 senedir fındıktan beklentim yok, gurur meselesi olmuş ‘Halil de gelmiş fındık toplamamış’ demesin diye, ben fındık müstahsili tanımıyorum ... Baba toprağı, ürünü toplar istediğimde satarım ... Köyde imece oluyordu, 10 sene vardır. İlla ki toplamaya geleceğiz, inşallah olur da. Bahçede bırakamazsın ... Her koşulda [üretime] devam eder, çocukları ettirmez. Babam 45’inde bıraktı, [çocuklarımın] eğitimleri için çok uğraşıyorum, dershaneye veriyorum, geçim zor, yeni ev aldık, yeni işim var ayda 1000 lira kazanıyorum.”

38:

“7 kardeş ve kayınvalide. 6 çocuğum var. Yazın fındık için geliyorum, kışın İstanbul’da yaşıyorum. Ev hanımıyım. Sigortam yok. Çocuklarınkinden yararlanıyorum. Tapuyu yeni alıyoruz, hazine arazisi yazılmasın diye uğraşıyoruz. Elimde, kayınpederden satın aldığımız, 9 dönüm yer var. Yakın yer diye hazinedeyken almıştım, hisseli oldu, netice alamadım. Nasıl ayrılacak 9 dönüm tapudan bilemiyorum. Kadastro geçerken hazineye yazıldı. Yanlış anlama yüzünden uğraşıldı. 9 senedir amcamla ortak. Herkes 1 kişiye vekalet verdi. Veraset dün alındı. Kayınpederim yerini görüncem işliyor. 9 dönümünü biz. Kayınpederimin topladığı yer kayınvalidemde. Ben parayla aldığım yeri topluyorum.”

39:

“Kadastro geçti, tapu verdiler, geçmeseydi daha iyiydi önceki durum, yer az geldi. Daha önce ölçümlememişti. 33 dönümdü, 23’e düştü. 5 kişinin 2’si kız, arazileri var,

2's, erkek, 1 de anne. 5 dönüme yakın. Sınırları bilmediği için hisseli tapu oldu yoksa şahsi tapu olacaktı. Küslük, dargınlık oldu. Muhtarın bulduğu adamlar benim yazıdan sonra haberim oldu. (kadastro) olmasaydı daha iyi olurdu, herkes kendi yerini toplayıp gidiyordu.”

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